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ABSTRACT

This publication contains two essays and an annotated bibliography of publications about risk. The entries in the bibliography were produced by the various clearinghouses in the ERIC system. The first essay, "Who Is at Risk? Definitions, Demographics, and Decisions," by Aaron M. Pallas, categorizes personal, family, and environmental factors that may place children at risk. Pallas presents demographic data on the distribution and size of the at-risk student population. He recommends reforms to mitigate the effects of risk and forecasts a growth of the at-risk population. The second essay, "On Being at Risk," by Jack L. Frymier and Neville L. Robertson, presents a working definition of risk ("risk of failure in life") and discusses the way in which individual differences influence particular students' responses to risk. The essay describes initial efforts at constructing a scale or index to identify risk. The discussion includes an examination of questions about the availability and confidentiality of data that bear on the conception of risk assumed in the scale. The bibliography includes 136 ERIC publications that appeared between 1986 and 1990, and that respond to a wide range of concerns of educators and other professionals working with at-risk students. Publications are listed alphabetically by author's name with a subject index. A description of the ERIC system and a list of ERIC clearinghouses is also included. (KS)

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Overcoming Risk: An Annotated Bibliography of Publications Developed by ERIC Clearinghouses

Edited by

Wendy Schwartz and Craig Howley

With two new essays by

Aaron Pallas

and

Jack Frymier and Neville Robertson

A joint publication of two ERIC *Clearinghouses:*

- *Rural Education and Small Schools*
- *Urban Education*

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TABLE OF CONTENTS

INTRODUCTION (Wendy Schwartz and Craig Howley) i

WHO IS AT RISK? DEFINITIONS, DEMOGRAPHICS, AND DECISIONS (Aaron Pallas) 1

Historical Approaches to the Concept of Risk 1

A Working Definition of Risk 5

The Demographics of At-Risk Students 7

The Distribution of At-Risk Children and Youth 13

Future Demographic Trends 14

The School Careers of At-Risk Students 16

Making Schools More Responsive to At-Risk Students 19

References 23

ON BEING AT RISK (Jack Frymier and Neville Robertson) 26

Can We Define the Concept? 27

What is the Relevance of Individual Differences for Students at Risk? 31

Can We Develop an Index or Scale to Identify Students at Risk? . . 34

What Are the Difficulties in Collecting Reliable Data? 38

How Do Schools Try to Help At-Risk Students? How Can They Be More Effective? 40

References 44

ANNOTATED BIBLIOGRAPHY: MAIN ENTRY SECTION 45

SUBJECT INDEX 80

THE ERIC SYSTEM 92

INTRODUCTION

The publication of Overcoming Risk is a collaboration of the ERIC Clearinghouse on Rural Education and Small Schools (ERIC/CRESS) and the ERIC Clearinghouse on Urban Education (ERIC/CUE). ERIC/CRESS and ERIC/CUE share an abiding interest in the context of education--those educational and social forces that surround and infuse education. Part of this work concerns disadvantaged students, since many rural and urban children have the socioeconomic, psychological, and cultural characteristics that seem to typify educational and social risk.

The combination of the growing diversity of the American population and the seemingly persistent qualities of schooling--variously identified as teacher-centered classrooms, top-down organizational structures, impersonal school climates, and so forth--pose additional risks for some children. These include African Americans, Alaska Natives, American Indians, Asian Americans, and Hispanic Americans, for example. Linguistic and cultural differences in such groups can, according to most accounts, put disproportionately many children from such groups at risk in contemporary classrooms.

The Contents of "Overcoming Risk"

Two essays introduce an annotated bibliography of publications about risk. The entries in the bibliography were produced by the various clearinghouses (16 altogether) in the ERIC system; all publications are available from the relevant clearinghouses and have been placed on microfiche in the ERIC database.

The first essay, "Who Is at Risk? Definitions, Demographics, and Decision," by Aaron M. Pallas, categorizes personal, family, and environmental factors that may place children at risk. Pallas presents demographic data on the distribution and size of the at-risk student population. He recommends educational reforms to

mitigate the effects of risk, and he provides projections of the growth of the at-risk population that underscore the urgent need for remedies.

The second essay, "On Being at Risk," by Jack L. Frymier and Neville L. Robertson, explores the practical issues of defining and addressing risk from the perspective of their recent work with the Phi Delta Kappa Foundation. The authors present a working definition of risk ("risk of failure in life") and discuss the way in which individual differences influence particular students' responses to risk. Their essay describes initial efforts at constructing a scale or index to identify risk. The discussion includes an examination of questions about the availability and confidentiality of data that bear on the authors' conception of risk.

The Bibliography

All the clearinghouses in the ERIC system were invited to submit citations of their own recent publications that treated the education of at-risk children. Hence, most of the 136 publications in this bibliography appeared between 1986 and 1990.

The documents respond to a wide range of concerns of educators and other professionals working with at-risk students. Some are in-depth monographs that treat a broad topic; others are two-page ERIC Digests that synthesize information about narrower topics. A few publications are themselves bibliographies related to the general topic of risk.

In the main entry section, the publications are listed alphabetically by author's name. The short annotations describing each publication were derived from the abstracts that each clearinghouse prepared for the ERIC database. The citation for each document includes:

- author's name,
- title,
- date of publication,
- name and location of the clearinghouse that published it, and
- the ERIC Document Reproduction Service number (ED number) assigned to it.

The Index

The subject index will help you find the publications of most interest to you in the main entry section. Under each subject heading, the index lists relevant publications by author's name, date of publication, and ERIC Document Reproduction Service number. The subject headings include all the major "descriptors" (organized in the Thesaurus of ERIC Descriptors) under which the 136 documents have been indexed in the ERIC database.

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WHO IS AT RISK? DEFINITIONS, DEMOGRAPHICS, AND DECISIONS

Aaron M. Pallas
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This paper examines issues concerning the definition of at-risk children, describes the current conditions of the at-risk population, and discusses what the future may hold for this group. Several common organizational strategies that schools use to serve at-risk students, and the consequences of those strategies for the school careers of at-risk students, are reviewed. The paper concludes by outlining a strategy for making schools more responsive to the needs of at-risk students.[1]

Historical Approaches to the Concept of Risk

Current responses to the needs of at-risk students represent the result of several shifts in thinking over the last 35 years. Different approaches to the problem of educating these youth have had quite different implications for programmatic solutions to it. Tracing the development of thinking about this population demonstrates the evolution of current definitions of who is at risk, and helps to explain the history of programmatic efforts to serve those at risk.

Over the last 35 years, we can distinguish at least four different themes in thinking about the at-risk population and strategies for serving it: cultural deprivation, educational deprivation, the problems of youth, and children at risk.

Risk as cultural deprivation. The problems of school-aged children in the late 1950s and early 1960s were frequently attributed to cultural deprivation. This perspective was based on the belief that children from socially and

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[1] Many of the ideas in this paper are drawn from a more extensive treatment of the issues in Gary Natriello, Edward L. McDill, and Aaron M. Pallas, Schooling Disadvantaged Children: Racing Against Catastrophe (New York: Teachers College Press, 1990).

economically disadvantaged backgrounds were exposed to a "culture of poverty" that failed to provide a stimulating environment for the development of academic and social skills. Cultural deprivation, which was closely tied to poverty and minority ethnic group status, was thought to produce socially disadvantaged children whose deficient environments in early childhood led to failure in school and adulthood.

This cultural deprivation perspective had two major effects on the social and educational programs of the early 1960s. First, because the perspective emphasized the importance of early childhood experience, educational policy focused on providing compensatory enrichment experiences to children born into culturally deprived environments. Preschool enrichment programs were the order of the day. Second, the cultural deprivation approach spawned a host of programs designed to give the culturally deprived the culture that they lacked. Thus, a great many social programs in the War on Poverty attempted to create a middle-class culture for the culturally deprived by providing them with middle-class schools, housing, and values.

Risk as educational deprivation. The key distinction between cultural deprivation and educational deprivation is where the blame for the poor academic performance of children is placed. Whereas the cultural deprivation perspective emphasized the disadvantaged family backgrounds of low performers, proponents of the educational deprivation notion pointed to the role of the school in producing poor performance. This was partly a reaction to concerns about "blaming the victim" (i.e:, Baratz & Baratz, 1970).

The notion that students are at risk because of educational deprivation suggested a different set of strategies for responding to the problem than did the cultural deprivation hypothesis. While programs stemming from the cultural

deprivation perspective dealt mainly with children's preschool experiences and their family backgrounds, programs arising from the educational deprivation approach focused on the school, and the lack of fit between poor, minority children and their schools. Moreover, the preschool period was de-emphasized, as the educational deprivation perspective held that the educational problems experienced by poor, minority children began after these children entered school.

Risk as failing institutions. The educational deprivation perspective drew attention to the educational problems faced by children after they entered school. However, schools are but one of the institutions which complex societies charge with educating their young people. In particular, families, communities, religious organizations, and work organizations also are thought to play important roles in socializing American youth to become competent adults. Some have thus questioned whether all youth are at risk due to the failure of these institutions.

This theme is clearest in the writings of Fantini and Weinstein (1968), who argued that all youth are at risk because all of our social institutions, especially schools, are ill-equipped to help individuals achieve their full human potential. It has been echoed by the Panel on Youth of the President's Science Advisory Committee (Coleman, Bremner, Clarke, Davis, Eichorn, Griliches, Kett, Ryder, & Doering, 1974), and most recently by Uhlenberg and Eggebeen (1986).

The policy implications of treating all youth as if they were at risk are quite different from the implications of the other perspectives outlined above. First, this perspective does not single out any subgroup of young people (i.e., by class or ethnicity) for classification as at risk. Second, the "all youth" perspective casts a broad shadow across all of the social institutions serving young people, not just schools. Uhlenberg and Eggebeen (1986), for example, point to breakdowns in the family as a major source of the problem. Third, the youth

perspective argues for a more comprehensi
might encompass a basic restructuring of
people. This notion is evident in the Pa
1974), which recommended different strate
economy to better serve youth.

Risk as probable student failure. M
educational failure have used the term "a
achievers in school. At-risk students ar
risk of experiencing some negative outcom
somewhat vague, as there are many possibl
be at risk of dropping out of school, or
numeracy skills, or of not achieving full

An individual who is at risk of some
that outcome, but may be likely to experi
borrowed from the fields of demography an
life events are expressed as the number o
or event in some time period divided by t
experiencing that disease or event. The
might be the number of women having live
total number of women aged 15-44 in that

Applying this notion directly to sch
anyone who has not yet dropped out of sch
and all students are at risk of performin
concept has been operationalized by ident
perform poorly or drop out. Youth who ha
to be at risk of dropping out, precisely

more comprehensive approach to a policy on youth, which
estructuring of how our social institutions educate young
vident in the Panel on Youth's report (Coleman et al.,
different strategies for integrating schooling and the
outh.

dent failure. Many of the recent discussions of
used the term "at risk" to describe the plight of low
risk students are young people who are thought to be at
negative outcome of schooling. The concept thus is
are many possible negative outcomes. An individual might
t of school, or of not mastering basic literacy and
t achieving full human potential, for example.
at risk of some negative outcome has not yet experienced
likely to experience it in the future. The concept is
of demography and epidemiology, where rates of disease or
as the number of individuals experiencing some disease
iod divided by the total number of individuals at risk of
or event. The female fertility rate, for instance,
men having live births in a given year divided by the
d 15-44 in that year.
directly to schooling is not that helpful, because
opped out of school is at risk of doing so in the future,
isk of performing poorly in school. Consequently, the
nalized by identifying subpopulations that are likely to
t. Youth who have been retained in grade twice are held
out, precisely because, on average, a high proportion of

this group do drop out. Students at risk of school failure are thus identified probabilistically, on the basis of measurable characteristics that are empirically related to their likelihood of school failure.

The concept of risk focuses attention on the characteristics of children and educational environments that are related to the likelihood of failing in school. This concept also highlights the importance of early identification of children at risk. In theory, if at-risk children are identified early, schools can construct alternative educational programs and policies to divert them from the path to school failure. The programmatic implications of the notion of risk, then, mainly concern the early identification of children who are likely to fail in school, and early intervention in the school careers of these children.

A Working Definition of Risk

None of these four perspectives conveys a concept of risk precisely enough to generate successful interventions for the population to which it is applied, for any definition of risk needs to be sensitive to the diverse educating forces shaping child development. Education is a process that goes on both inside and outside of schools, and schools are just one of several social institutions that are charged with educating our children. In particular, families and communities, along with schools, are the key educating institutions in our society.

Thus, it is appropriate to conclude that young people are at risk, or educationally disadvantaged, if they have been exposed to inadequate or inappropriate educational experiences in the family, school, or community. The definition is intentionally vague about what constitutes "inadequate" or "inappropriate" experiences, as it would be difficult to secure agreement on what would be adequate or appropriate. Still, this definition provides some broad

guidance for assessing the extent to which contemporary children can be described as educationally disadvantaged or at risk.

This working definition also is sensitive to the match between individuals and their environments, without becoming bogged down in finger pointing over where the blame for a bad match should lie. Because schools, families, and communities all are important educating institutions, a child may be at risk due to experiences in any or all of these institutions.

Acknowledging these three sources of influence explicitly highlights a critical weakness in most programmatic approaches to serving at-risk or disadvantaged youth. Tinkering with a child's school experiences is unlikely to have any impact on the effects of the community context or the family environment on a child's academic development. This definition of risk makes clear that focusing solely on the school as a policy lever cannot solve the problem of at-risk youth.

Moreover, the definition draws attention to the persistent effects of exposure to schools, families, and communities. Schools, families, and communities continue to influence children's development throughout their educational careers. Early intervention programs that bombard children with special services as they enter school, but are discontinued shortly thereafter, assume that once children are brought up to speed in school, they can continue to make normal progress. This philosophy ignores the ongoing impact of extra-school factors like family and community environments. Thus, this definition suggests the need for programmatic strategies that serve at-risk children throughout their school careers, not just at the beginning.

The Demographics of At-Risk Students

The definition of "risk" outlined above challenges the ability to define precisely the at-risk population. Securing widespread agreement about which characteristics of individuals or their environments place them at risk would be difficult. In order to make this task manageable, it is necessary to limit the bounds of the discussion. Thus, the outcomes of student risk should be considered here as low achievement in school and dropping out of school. Dropping out is not especially interesting in its own right, but whether or not a student has dropped out can be used as a proxy for many other outcomes, including basic skills mastery, persistence and appropriate values and attitudes, and preparation for work. Moreover, over the last ten years, interest in the dropout phenomenon has generated a host of studies on which to rely.

Second, the characteristics of individuals as predictors of these negative outcomes are emphasized, although doing so is not meant to slight the importance of school and community environments as contexts in which education takes place. There is no doubt that communities and schools play an important role in structuring the educational chances of young people. Unfortunately, there is a dearth of data on what makes communities or schools supportive or alienating environments, and what available knowledge is quite primitive. Data on the characteristics of individuals also are far from ideal, but at least there are consistent sources of data on which to rely.

Indicators of risk. Five factors placing young people at risk of school failure are examined below: racial and ethnic identity, poverty status, family composition, mother's education, and language background. Each of these factors is correlated with dropping out of school or low achievement in school, although there is no consensus on the explanations for these associations. These risk

factors probably are associated with exposure to inadequate or inappropriate educational resources and experiences.

Poverty, for instance, likely signals not only limitations on family educational resources, but poor children also are more apt to live in poor communities with limited educational resources, and to attend poor schools with inadequate facilities and materials.

Is it a mistake to conclude that all poor children, or all minority group children, are at risk? Clearly some poor children, black children, and children in single parent households are exposed to adequate educational resources. It thus would be unwise to generalize from the color of a child's skin or the economic status of that child's family to the educational resources to which that child might have access. But the notion of being at risk implies probabilities, not certainties. As will be shown, there is little question that children who manifest these five risk factors are more likely to fail in school. In this sense, all poor children or all children with limited English proficiency are at risk, although not all of these children are destined to fail in school.

The issue here is what is gained or lost by describing children in this way. The literature on labeling (e.g., Rist, 1970) warns of the pernicious effects of publicly classifying children, as teachers, parents, and peers may change their expectations and behaviors to conform with stereotypes associated with these classifications. On the other hand, the early identification of children at risk makes it possible for schools and other service providers to target their services to these students, who are the most likely to be in need of them. Clearly, there is a trade off to be made here: the benefits of early identification must be weighed against the possible hazards of falsely categorizing children as being in

need of special resources, programs, or attention, and the costs of throwing money and resources at children who may not need them.

Poverty. Children who live in poverty are more likely to perform poorly in school and to drop out of school than children who do not. The evidence is overwhelming, although credible data on the poverty status of children are scarce. In any event, children from low-income families are at much greater risk of school failure than children from higher-income households. One recent study found that, among U.S. high school sophomores in 1980, 24 percent of those in the lowest income quintile had dropped out of school by 1982, but only 11 percent of the remaining sophomores had dropped out (Stedman, Salganik, & Celebuski, 1988).

More than 12 million children under the age of 18 were living in poverty in 1987 (U.S. Bureau of the Census, 1988). This number implies that about one in five children lived in families below the poverty line. Poverty is not randomly distributed throughout the population. Black and Hispanic children are three to four times more likely to be living in poverty than non-Hispanic white children, and children living in single parent households also are much more likely to be living below the poverty line.

Race and ethnicity. Although there is little agreement on possible explanations for racial/ethnic group differences in school performance, virtually everyone recognizes that these differences exist. In particular, black and Hispanic youth score substantially lower than whites on a diverse array of standardized tests of academic achievement, including the National Assessment of Educational Progress (Applebee, Langer, & Mullis, 1988; Dossey, Mullis, Lindquist, & Chambers, 1988). These test score differences are sizeable even in the early grades, although they often appear larger as children progress through school. In addition to the minority shortfall in academic achievement, nonwhite youth are

considerably more likely to drop out of high school than non-Hispanic white youth (Peng, 1983; Bruno, 1988).

About 19 million children under age 18 were black, Hispanic, or Asian or Pacific Islanders in 1988. About half of this minority population were black, and more than a third were Hispanic. Overall, about 30 percent of the under-18 population in 1988 was nonwhite.

Family composition. Children growing up in single-parent households frequently spend much of their childhood in poverty (Ellwood, 1988). No doubt this is part of the reason why children in single-parent families are at such great risk of school failure. Data on third-grade reading and mathematics achievement drawn from the 1986 National Assessment of Educational Progress show that children in homes where either a mother or a father was not present scored substantially lower than children living with both parents (Natriello, McDill, & Pallas, 1990). Children living with single parents also are much more likely to drop out of high school than those living with both parents (Stedman et al., 1988).

More than 17 million children under age 18 lived in households without both parents present in 1988 (U.S. Bureau of the Census, 1989). Of these, more than three-quarters lived in households with just a mother present. The remainder were almost evenly split between households with just a father present, and households with neither parent present. Overall, more than one-quarter of the under-18 U.S. population lived in a single-parent or neither-parent household in 1988.

Mother's education. Mothers play an important role in the education of their children, particularly because most Americans still expect mothers to take primary responsibility for children's upbringing. Consequently, a mother's social characteristics may largely determine the quality of the educational environments

to which a child is exposed. Moreover, mothers frequently are the only family members to try to manage their children's school careers (Baker & Stevenson, 1986). Highly educated mothers are more successful at this task (Baker & Stevenson, 1986) and can provide children with educational resources that less-educated mothers cannot. It is no surprise, then, that children of highly educated mothers do better in school, and stay in school longer, than children whose mothers have not completed high school.

For example, Natriello and colleagues (1990) have shown that third-grade children whose mothers had not completed high school scored much lower on the 1986 National Assessment of Educational Progress mathematics and reading assessments than similarly aged children whose mothers had at least completed high school. Moreover, Barro and Kolstad (1987) have shown that, of the high school sophomores participating in the 1980 High School and Beyond study, nearly one-quarter of those sophomores whose mothers had not completed high school dropped out of school between 1980 and 1982, while only about 12 percent of sophomores whose mothers had completed high school or obtained some college dropped out over the same period. Barro and Kolstad found that only about 7 percent of the participants in the study whose mothers had been graduated from college or obtained even more schooling dropped out of high school between 1980 and 1982.

Nearly 13 million children under the age of 18 in 1987 lived with mothers who had not completed high school. These children were disproportionately black and Hispanic, as the educational attainment levels of black and Hispanic mothers are much lower than those of white mothers. Overall, about one child in five under the age of 18 in 1987 was living with a mother who had not completed high school.

Language background. Children with limited proficiency in English face obvious barriers to success in schools in which English is the language of

instruction and evaluation. Few issues are as politically volatile as those surrounding the schooling of children who lack English proficiency. Whatever the source of the disadvantage, it is clear that children with limited English proficiency score lower on tests of academic achievement and are more likely to drop out of school than children who are proficient in English.

Natriello and colleagues (1990) report that third graders who speak a language other than English at home at least some of the time are about half a year behind other third graders who speak only English at home in reading and mathematics achievement. They also find that the frequency of other language use makes a difference, with third graders who say that a non-English language is often spoken at home almost a full year behind those third graders claiming that a non-English language is seldom or never spoken at home. In addition, use of a non-English language at home is associated with dropping out of high school; high school sophomores in the High School and Beyond study who reported that no English was spoken in their homes were more than twice as likely to drop out of high school than students from homes where English was the only or primary language (Salganik & Celebuski, 1987).

The assessment of who is at risk by virtue of language background is a tricky one, and there is little agreement on how to define this group, or how many children should be so classified. Various estimates suggest that anywhere from 1.2 million to 2.6 million children had limited proficiency in English in 1986, but there is no compelling reason to prefer one figure over another, and the "true" number may lie outside that range. If this range is accepted, however, it can be concluded that between two and four percent of the under-18 population has limited proficiency in English.

The Distribution of At-Risk Children and Youth

While at-risk children can be found in all corners of the country, there are higher concentrations of at-risk children in urban centers and rural areas than in suburban areas. For example, the poverty rate for children is about 31 percent in the central cities of metropolitan areas, and about 24 percent in rural areas, but only 13 percent in suburban settings (Natriello et al., 1990). Children in central cities also are more likely to live in single-parent households (U.S. Bureau of the Census, 1986), and to have poorly-educated mothers (Bruno, 1984), and there is some evidence that children with limited proficiency in English also are concentrated in central cities (Milne & Gombert, 1983).

While these data seem to suggest that the plight of at-risk children is largely an urban problem, the figures can be deceptive, because there are great numbers of American children who do not reside in the central cities of metropolitan areas. In fact, Ellwood (1988) has shown that about two-thirds of Americans living in poverty live outside of large cities, and nearly one-half live in rural areas, small towns, and small metropolitan areas. We tend to emphasize the conditions of central cities because the concentration of disadvantaging forces is so great, but it would be a mistake to ignore the sheer numbers of at-risk children who live outside central cities.

The regions of the country with the highest proportions of children at risk of school failure are the South and the Southwest. These regions include a substantial share of the nation's black and Hispanic populations. In addition, poverty rates are somewhat higher, and levels of educational attainment are noticeably lower, in the South than in the rest of the country. The data on children with limited proficiency in English largely track the distribution of Hispanic children, with California, Texas, and New York housing more than

two-thirds of the population of limited English proficient children (Milne & Gombert, 1983).

Future Demographic Trends

The school-aged population of the future may look less and less like the school-aged population of the past. Whether or not schools will be able to respond with appropriate changes is an open question. It is important for parents, educators, and policymakers to anticipate possible changes in the composition of the student body attending our nation's schools, because the schools of the future should take these changes into account.

The current conditions and future trends in the school-aged population do warrant serious questioning of the organization of schooling. The current conditions, discussed earlier, describe a student population with roughly 40 percent at possible risk. With the projected changes in the school-aged population, this proportion will increase, perhaps substantially.

While it is impossible to predict the future with any certainty, the likely consequences of some explicit assumptions about demographic trends can be considered. First, it might be assumed that Hispanic fertility rates will remain high (currently they are much higher than those of non-Hispanics). Second, the fertility rates of non-Hispanic whites may maintain the slow, steady decline observed over the last two decades. Third, Hispanic immigration may stay relatively high.

The primary consequence of these assumptions is that the under-18 U.S. population will become increasingly nonwhite. Natriello and colleagues (1990) have shown, using Census projections, that the number of non-Hispanic white children is expected to decline by 27 percent between the years 1988 and 2020, while the number of Hispanic children is expected to almost triple over this same

period. Whereas about 70 percent of the current under-18 population is non-Hispanic and white, only about 50 percent of this age group is projected to be non-Hispanic and white in 2020. In contrast, while only about 11 percent of the current under-18 population is Hispanic, about 28 percent of this group is expected to be Hispanic in 2020.

Obviously, not all Hispanics are alike; in fact there are important differences among Hispanic subgroups, both in their social and economic status and in their chances for educational success. This is true of blacks and other racial and ethnic groups as well (including whites). Barring any changes in the material and social resources available in black and Hispanic families, and the school and community resources to which their children are exposed, black and Hispanic children will be just as much at risk of school failure in the future as they are today. In fact, they may be at even greater risk, as there will be an increasing number of children at risk, and they will comprise a larger share of the school-aged population.

The logic of this argument is straightforward. Black and Hispanic children are much more likely to live in poverty than are non-Hispanic white children. In the future, there will be many more Hispanic and black children, and fewer non-Hispanic white children. As a result, there will be many more children living in poverty in the future, and the proportion of all children who are living in poverty will be greater. In addition, the number and proportion of children who do not live with both parents, who have a poorly educated mother, and whose primary language is not English all will rise substantially over time. Consequently, unless some force intervenes in this cycle, the school-aged population of the future will be even more at risk of school failure than today's children.

The School Careers of At-Risk Students

As noted earlier, when the term "at risk" is used to denote students who may perform poorly in, or drop out of, school in the future, the notion of early identification becomes an important policy issue. If we can identify children at risk of school failure early in their school careers, perhaps we can provide the programs and services they need to reduce the likelihood of failing in school.

In fact, U.S. schools already try to do this. Schools use various organizational forms, like grade retention and ability grouping, as tools to shape the school program offered to low-achieving students. The irony is that, in many cases, grade retention and tracking have the unintended consequence of placing such students even further at risk of school failure. The evidence suggests that, rather than helping children regain parity with their higher achieving peers, grade retention and tracking instead, propel children further away from parity, by diluting the school curriculum and damaging the delicate social-psychological mix which motivates children to strive for success in school.

For instance, the school reform movement of the early 1980s brought a resurgent interest in standards for performance in schools. An apparent consequence of this movement was an increase in the proportion of children retained in grade. For years educators have promulgated policies on grade retention based largely on their sense that grade retention is a rational organizational response to children's failure in school. Unfortunately, there has been little direct evidence on the effects of grade retention on children's achievement levels, self-esteem, or prospects for completing school. This finding holds true even today, although several teams of researchers are pursuing the issue further.

The existing body of evidence on the effects of grade retention in the primary grades is not conclusive. It is quite clear that, on average, children who are retained in grade early in their school careers are much more likely to fail in school later on, but it is extremely difficult to isolate how much of their school failure is due to being held back, and how much to academic and social problems that began before such children were retained in grade. Many researchers have concluded that grade retention does not have positive effects on children's academic development, but not all of these have found that grade retention induces children to do less well in school than they would have otherwise. In spite of the ambiguity in much of this work, several research reviews have concluded that grade retention does not work (Jackson, 1975; Holmes & Matthews, 1984; Shepard & Smith, 1988).

The story is much the same for homogeneous ability grouping in the primary grades and tracking in the secondary grades. Children placed in low groups and tracks do not do as well in school as children assigned to higher groups and academic tracks. Here too, though, the evidence frequently is ambiguous, because children are often assigned to ability groups on the basis of their achievement levels, and it may be that these initial differences, not the ability grouping itself, account for the later gaps in achievement observed between low track and high track children.

Whether or not it can be concluded that placement in a low group or track has long-term educational consequences, it is clear that the school experiences of children assigned to low groups differ substantially from those of children in higher groups. In the early grades, children in low groups are exposed to less material, taught at a slower pace, and exposed to less interesting and less challenging instructional techniques (Barr & Dreeben, 1983; Hallinan, 1987). The

standards for behavior and attention also are lower in low groups (Eder, 1981). At the secondary level, low track students experience a watered-down curriculum, accompanied by lower teacher expectations and lessened educational support from their peers (Gamoran & Berends, 1987; Oakes, 1985).

The very difficulty in gauging the effects of grade retention or placement in a low track highlights an important, persistent finding in educational research: early behaviors and performance predict later behaviors and performance. No individual's life course is immutable, but there is a great deal of stability in children's academic success from year to year, and even across many years. There are far too few longitudinal studies of children and youth addressing this issue, but the extent findings are relatively consistent.

Space does not permit a detailed review of such studies, but there is evidence that academic and social behavior in the early elementary grades can predict adolescent delinquency (Ensminger, Kellam, & Rubin, 1984), adolescent substance abuse (Ensminger, Brown, & Kellam, 1982), junior high and high school academic achievement (Stevenson & Newman, 1986; Entwisle & Hayduk, 1988; Hess, Holloway, Dickson, & Price, 1984), and dropping out of high school (Lloyd, 1978).

There are several plausible explanations for the stability in academic and social behavior implied by this body of longitudinal research, but it is important to highlight two of these. First, histories of school failure are cumulative, and with each passing year, it becomes more and more difficult to escape the weight of a growing mass of failure. This is one explanation for why dropout prevention efforts targeted at the high school years are so ineffectual at changing the downward trajectories on which so many at-risk youth are headed.

Second, school careers seem to reinforce preexisting social inequities; they act to perpetuate the advantages or disadvantages that children bring with them at

the outset of schooling. The organization of instruction and the social context of schooling tend to accentuate children's initial aptitudes and dispositions. Ability grouping and grade retention are examples of organizational strategies that have the unintended consequence of reinforcing patterns of failure in school. A vicious cycle exists in schools, whereby early patterns of poor academic performance track students into educational environments that perpetuate their low achievements.

Making Schools More Responsive to At-Risk Students

The current debates over strategies for restructuring schools are clouded by misunderstandings about the problem of educating at-risk students. Natriello and colleagues (1990) present a more elaborate theory-driven approach to restructuring schools to make them more responsive to at-risk or disadvantaged students. This paper concludes here by outlining some of the underpinnings of that approach.

Accounting for diversity. Five key assumptions should underlie the framework for schooling at-risk students. First, schools have students with diverse needs. All students bring with them unique family backgrounds, school experiences, and academic histories. These differing backgrounds and experiences imply that students have different educational needs. Strategies for restructuring schools must take account of the diverse populations that U.S. schools serve.

Second, schools have diverse goals. Society has charged schools with carrying out a wide range of activities to prepare children to be competent adults: the teaching of basic literacy and numeracy skills; imparting commonly agreed-upon moral values, training youth to be good citizens; preparing youth for work, readying them for adult family roles and responsibilities, preparing students for higher learning, and on and on. Like it or not, schools are held

accountable for performing these very diverse functions. Any restructuring strategy must be sensitive to the diverse goals for which schools are responsible.

Third, society is demanding that schools serve an increasing number of students well. Not more than 50 years ago, less than half of American youth completed high school; and at the turn of the century, only about 10 percent did so. In those earlier eras, a limited education did not present a major obstacle to adult success. But the current economy demands an increasing number of highly skilled and educated workers, and there are fewer and fewer jobs for the poorly educated. Schools are being held accountable to do a better job of educating a larger share of the population than ever before. School restructuring strategies thus cannot afford to write off any of our young people.

Fourth, the demography of the school-aged population is changing. The sharp changes in the nature of the school-aged population projected for the next 30 years were documented earlier in this essay. Schools will more frequently be called upon to educate children from homes and communities lacking important material, social, and educational resources. Through no fault of their own, these children will be more difficult to educate than other children. Any restructuring strategy must be sensitive to this fact.

Finally, there is no one best system for educating our youth. While many schools use supposedly "tried and true" instructional methods, none works especially well, and it is equally clear that no single instructional strategy works well for all children all of the time. Our schools are still, for the most part, operating in the dark, as research, professional practice, and lay opinion have failed to divine surefire technologies of instruction for each of their diverse populations. Whether or not such surefire techniques are forthcoming is doubtful at best. The upshot is that schools <u>lack</u> "certain knowledge" about how

they should go about doing their jobs. Strategies for restructuring schools must make provisions to accommodate this ambiguity.

These assumptions highlight the diverse nature of American schools and the uncertainty which accompanies this diversity. Schools have diverse inputs, diverse outputs, and an uncertain technology for translating those inputs into the desired outputs. Even if the school were a factory producing widgets, it would be in trouble. Part of the task of rethinking the structure of schools is to get away from the metaphor of the school as factory. The notion of mass production no longer fits. It is not responsive enough to address existing--let alone emerging--needs.

Risk and responsiveness. The working definition of "risk" outlined earlier in this essay emphasizes the match between individuals and their educational environments. Children are at risk when the educational environments, programs, and experiences to which they are exposed are inappropriate to meet their educational needs and potentials. According to this view, the problem of restructuring schools is one of improving the match between students and the educational services to which they are exposed, in short, making schools more responsive to students.

There are three key elements to making schools more responsive to at-risk students. First, schools must have, or have access to, the appropriate academic and nonacademic programs and services that their students need. If schools do not have available the right resources, all the restructuring in the world is unlikely to make much of a difference. Second, schools need information to match students with the available programs and services. Having the right programs and services isn't going to make a difference if the school doesn't know which students should receive them. Third, there is a need for speed. Schools must be able to react

quickly to the academic and nonacademic symptoms that students present. Hospitals can act quickly to treat their patients; schools should be able to act quickly to respond to their students, too. Untreated academic and nonacademic problems can be just as serious as untreated medical problems.

The challenge facing American educators and policymakers is daunting. The necessary large-scale changes in schooling and social policy will not happen overnight. The obstacles are political, social, and economic and will not be easy to overcome. Clear thinking about who is at risk of school failure and why is only a small step in the right direction.

REFERENCES

Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1988). Who reads best? Factors related to reading achievement in grades 3, 7, and 11. Princeton, NJ: Educational Testing Service.

Baker, D. P., & Stevenson, D. L. (1986). Mothers' strategies for children's school achievement: Managing the transition to high school. Sociology of Education, 59, 156-166.

Baratz, S. S., & Baratz, J. C. (1970). Early childhood intervention: The social science basis of institutional racism. Harvard Educational Review, 40, 29-50.

Barr, R., & Dreeben, R. (1983). How schools work. Chicago: University of Chicago Press.

Barro, S., & Kolstad, A. (1987). Who drops out of high school? Findings from High School and Beyond (Report No. CS 87-397c). Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

Bruno, R. R. (1984). Educational attainment in the United States: March 1981 and 1980 (U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 390). Washington, DC: U.S. Government Printing Office.

Bruno, R. R. (1988). School enrollment--Social and economic characteristics of students: October 1986 (U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 429). Washington, DC: U.S. Government Printing Office.

Coleman, J. S., Bremner, R. H., Clark, B. R., Davis, J. B., Eichorn, D. H., Griliches, Z., Kett, J. F., Ryder, N. B., & Doering, Z. B. (1974). Youth: Transition to adulthood. Chicago: University of Chicago Press.

Dossey, J. A., Mullis, I. V. S., Lindquist, M. M., & Chambers, D. L. (1988). The mathematics report card: Are we measuring up? Princeton, NJ: Educational Testing Service.

Eder, D. (1981). Ability grouping as a self-fulfilling prophecy: A micro-analysis of teacher-student interaction. Sociology of Education, 54, 151-162.

Ellwood, D. T. (1988). Poor support: Poverty in the American family. New York: Basic Books.

Ensminger, M. E., Brown, C. H., & Kellam, S. G. (1982). Sex differences in antecedents of substance use among adolescents. Journal of Social Issues, 38(2), 25-42.

Ensminger, M. E., Kellam, S. G., & Rubin, K. H. (1984). School and family origins of delinquency: Comparisons by sex. In K. T. Van Dusen & S. A. Mednick (Eds.), Prospective studies of crime and delinquency (pp. 73-97). Boston: Kluwer-Nijhoff.

Entwisle, D. R., & Hayduk, L. A. (1988). Lasting effects of elementary school. Sociology of Education, 61, 147-159.

Fantini, M. D., & Weinstein, G. (1968). The Disadvantaged: Challenge to Education. New York: Harper & Row.

Gamoran, A., & Berends, M. (1987). The effects of stratification in secondary schools: Synthesis of survey and ethnographic research. Review of Educational Research, 57, 415-435.

Hallinan, M. (1987). Ability grouping and student learning. In M. Hallinan (Ed.), The social organization of schools: New conceptualizations of the learning process (pp. 41-69). New York: Plenum Press.

Hess, R. D., Holloway, S. D. Dickson, W. P., & Price, G. G. (1984). Maternal variables as predictors of children's school readiness and later achievement in vocabulary and mathematics in sixth grade. Child Development, 55, 1902-1912.

Holmes, C. T., & Matthews, K. M. (1984). The effects of nonpromotion on elementary and junior high school pupils: A meta-analysis. Review of Educational Research, 54, 225-236.

Jackson, G. B. (1975). The research evidence on the effects of grade retention. Review of Educational Research, 45, 438-460.

Lloyd, D. N. (1978). Prediction of school failure from third-grade data. Educational and Psychological Measurement, 38, 1193-1200.

Milne, A., & Gombert, J. (1983). Students with a primary language other than English: Distribution and service rates. In K. Baker & A. DeKanter (Eds.), Bilingual Education (pp. 113-138). Lexington, MA: Heath.

Natriello, G., McDill, E. L., & Pallas, A. M. (1990). Schooling disadvantaged children: Racing against catastrophe. New York: Teachers College Press.

Oakes, J. (1985). Keeping track: How schools structure inequality. New Haven: Yale University Press.

Peng, S. S. (1983). High school dropouts: Descriptive information from High School and Beyond (Report No. 83-221b). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Rist, R. C. (1970). Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 40, 411-451.

Salganik, L., & Celebuski, C. (1987). Educational attainment study: Preliminary tables. Washington, DC: Pelavin Associates.

Shepard, L., & Smith, M. L. (Eds.). (1988). Flunking grades: Research and policy on retention. London: Falmer.

Stedman, J. B., Salganik, L. H., & Celebuski, C. A. (1988). Dropping out: The educational vulnerability of at-risk youth. Washington, DC: Congressional Research Service.

Stevenson, H. W., & Newman, R. S. (1986). Long-term prediction of achievement and attitudes in mathematics and reading. Child Development, 57, 646-659.

U.S. Bureau of the Census. (1986). Household and family characteristics: March 1985 (Current Population Reports, Series P-20, No. 411). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1989). Marital status and living arrangements: March 1988 (Current Population Reports, Series P-20, No. 433). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1988). Money income and poverty status in the United States: 1987 (Advance data from the March 1988 Current Population Survey) (Current Population Reports, Series P-60, No. 161). Washington, DC: U.S. Government Printing Office.

Uhlenberg, P., & Eggebeen, D. (1986, Winter). The declining well-being of American adolescents. The Public Interest, 82, 25-38.

ON BEING AT RISK

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We Americans have a long tradition of honoring youth: In their hands lies the future of this country. In fact, we have always believed that each new generation will enjoy a higher quality of life than did the previous generation, and that the United States will continue its pre-eminence in the world of nations. As the twenty-first century approaches, a litany of problems faces this country. Of primary concern, however, should be the plight of our children.

After dropping from 27 percent in 1959 to 15 percent in 1970, the proportion of children born into poverty rose steadily to a high of 22 percent in 1983. Although this rate had dropped to 20 percent by 1985, the rate for Hispanic children stood at an all-time high of about 40 percent in that year, whereas the rate for non-Hispanic whites was about 16 percent and, for blacks, about 43 percent (U.S. Department of Commerce, 1987). And there are the related problems: the incidence of violent crimes committed by the young, the serious consequences facing the majority of unwed teenage mothers, and the thousands of young people struggling with the problems of drug abuse. Is it surprising that the phrase "at risk" came into being at this juncture?

In spite of this bleak picture, Lisbeth and Daniel Schorr (1989) in their excellent and aptly titled book, Within Our Reach, sound a note of optimism. At the outset they point to a strange and tragic paradox:

> Confidence in ability to alter the destinies of vulnerable children has hit bottom just as scientific understanding of processes of human development and the rich evidence of success in helping such children have reached a new high.

The authors document the many success stories encountered in the travels that preceded the writing of their book. They believe that if current knowledge is to be harnessed to intervene on behalf of children growing up at risk, two changes must take place. First, more Americans must understand the high stakes involved in the futures of these children and, second, more Americans must be convinced that educators know what needs to be done and how to do it.

The definition of educational risk, however, is crucial to providing children what they need. One thing is sure: Whatever the definition, it will help determine the policies and interventions subsequently devised to address the problems facing at-risk children. This essay proposes answers to the following questions in order to provide a better understanding of at-risk children:

1. Can we define the concept of educational risk?
2. What is the relevance of individual differences for students at risk?
3. Can an index or scale be developed to identify students at risk?
4. What are the difficulties in collecting reliable data?
5. How can schools more effectively help at-risk students?

Can We Define the Concept?

What do we mean when we claim that a student is at-risk? The American Heritage Dictionary defines "risk" as the possibility of suffering harm or loss. The phrase "at risk" obviously refers to a situation in which jeopardy of some undefined danger or loss affects an individual. A wide review of the literature reveals two categories of definitions, one limited to the academic dropout and the second extending to the total life circumstances of the individual student.

The academic dropout definition. Troob (1985) believes that the term "dropout" belongs to a world in which completion of school is expected; in this world the incoming high school freshman can expect four years of challenging

experiences that earn a diploma. In this context, risk denotes the potential to absent oneself from such experiences. Typically, educators employ measures of academic failure (e.g., failing a course or courses in school, continued absences, retention in grade, suspension, not completing homework assignments) to identify potential dropouts. This strategy is the "academic" approach to educational risk. It is useful and valid, but limited.

The whole life circumstances definition. Relying solely upon academic measures to determine which students are at risk is a less productive strategy than one that seeks out indicators outside, as well as within, the school. If, as many people believe, academic measures are largely manifestations or symptoms of more serious problems faced by students outside school, these other factors must be understood more thoroughly. To collect complete and reliable data on them is a formidable task, and some critics might argue that this task is not the responsibility of the educator. Nevertheless, if students are to be identified early as being at risk (so that intervention can diminish the relevant risks before problems become entrenched), then a definition that is not limited to school activities is essential.

Such a definition does not say that school activities are unimportant. In fact, increasing the likelihood of school success is the point of the interventions covered by any definition. It is simply better to regard academic information as necessary, but not sufficient, to characterize students' at-risk status.

Frymier and colleagues (Frymier, 1989; Frymier & Robertson, 1990) defined at-risk students as those being at risk of failure both in school and in life. They devised a concept of "total risk" composed of "academic risk" and "other risk." The academic subset closely follows the factors outlined by Troob (1985) and

others who have concentrated on school dropouts. Frymier (1989) defined "other risk" as those factors outside school--such as family socioeconomic status, family instability, family tragedy, and personal pain--that place the student in jeopardy.

Failure to complete school or failure in life suggests children are in complete control of their lives. Failure in school is not necessarily the result of a lack of motivation, however. Similarly, failure in life is not always a consequence of lack of responsibility or the result of apathy. Adults, as well as children, frequently find themselves in circumstances beyond their control.

Children can be placed at risk at the time of birth, or even before. One has only to consider the unborn child who is subjected to the smoking, alcohol, or drug abuse of the parents to realize that a child's life may be threatened from conception. Many children born without catastrophic damage, however, often have physical problems because their mothers had no health insurance, and thus little or no prenatal care. These problems, while not life threatening, may have life altering consequences. Physical problems may persist for a long time and have significant effects on such children's subsequent learning in school. When the prenatal effects of poverty are compounded by inadequate nourishment, children's learning may suffer even more.

The impact of poverty upon the lives of many children is particularly striking. Children born and brought up in poverty have so many obstacles to overcome that it is a wonder any manage to succeed. Poverty seems, for example, to escalate the rates of teenage pregnancy, often with devastating intergenerational consequences. Poor children give birth to poor children; and in the process, our society gives birth to a permanent underclass. Some observers might argue that these teenagers are failing in life simply because they are not

exercising the necessary responsibility and control. In circumstances other than poverty (which entails social and psychological dimensions) such an observation might be accurate. In poverty, however, the birth of a child seems to promise affection and attention to the prospective mother--someone to love and to be loved by.

Thus, an understandable and comprehensive definition of risk is required. Such a definition must allow for feasible intervention strategies that have the potential to improve the overall quality of a given student's life.

A resolution. Rutter (1980), in a discussion of causes and influences that must be considered before remedies can be prescribed for problems, obviously favored a comprehensive approach. He presented a modified model of a 1978 conceptualization of the group of variables contributing to an explanation of vandalism (Clarke, 1978, cited in Rutter).

This model of causation has four principal components: individual predisposition; ecological disposition; current circumstances; and situations and circumstances prevailing at the time.

- Individual predisposition includes heredity, physical factors, illness, family environment, and upbringing.
- Ecological environment comprises school ethos, peer group culture, and community factors.
- Current circumstances take into account the stresses and supports for the individual.
- Prevailing situation and circumstances describe the individual's present status.

Rutter pointed out that the four components were not truly separate and that there were complex interactions among them.

Pallas, in the companion essay in Overcoming Risk, traces the philosophies that inform various definitions of risk over time, and then formulates a revised definition:

> Thus, young people are at risk, or educationally disadvantaged, if they have been exposed to inadequate or inappropriate educational experiences in the family, school, or community.

He conceded that this definition was intentionally vague about what constitutes "inadequate" or "inappropriate" because of the difficulty in securing agreement on what would be adequate or appropriate. The strength of this definition is that it provides broad guidance for assessing the extent to which children can be described as educationally disadvantaged. It is also in broad agreement with Rutter's conceptualization of adolescent behavior and Frymier's definition of failure in school and in life. It does not, however, suggest that children "fail," but rather that they are disadvantaged because they have been exposed to inadequate or inappropriate experiences, which may have taken place at any time during the child's life, from the moment of conception forward. For these reasons, Pallas's definition is the one that is accepted as the basis for this essay.

What is the Relevance of Individual Differences for Students at Risk?

America is committed to achieving and maintaining a socially integrated but heterogeneous society: Diversity is valued, differences are important. Changing demographics challenge this commitment as the implications of change become manifest. In particular, attention is focused on the disproportionately high representation of at-risk students among minority groups. Studies also point to other categories of students who are more at risk than their counterparts. Included among these are older students as compared with younger students, and students in urban and rural schools as opposed to those in suburban schools.

Care must be taken, however, not to emphasize these trends at the expense of the individual students. There is no such thing as a "typical" student. And school programs that presume there is "one best way" of working with students are not likely to be effective.

Case studies. Research studies investigating students at risk typically provide statistical data about variables such as dropout rates, personal demographics, academic achievement levels, number of teenage mothers, and so on. These data provide necessary and valuable information, but case studies reveal the individuality of students by providing insights that numerical data cannot capture.

Frymier and Robertson (1990) used the case study approach. If there was one particular feature that stands out among their studies, it was the uniqueness of the individual students, although each had been identified originally as being seriously at risk. Many shared common problems--below average scores in reading achievement, incomplete homework assignments, suspension for disruptive behavior in the classroom, substance abuse, single parenthood while still in school, and suicide attempts--but each student stood out as a distinct person with different ways of trying to cope with the environment.

Examples of these individual differences abound. There was, for example, ten-year old Javier, who disliked school intensely. Javier discovered that by not attending classes, he was rewarded by being suspended from school. Amber, a brilliant student with an outstanding talent for composing music and writing poetry, found the rules and regulations of her traditional school so stultifying and oppressive that she dropped out in order to complete a GED and could go on to college. Nicole, a fifteen-year old sophomore, sold drugs in order to buy gasoline for her parents' car, which she used without permission at night and for

which she was arrested and sent to a detention center following her mother's report to the police. And what of the case of Martin, who was still illiterate at fifteen years of age when he and his two brothers were charged with the murder of his brother-in-law? He spent four years on death row before his sentence was commuted to life imprisonment. He now reads sufficiently well to be embarking upon a college career in computer science. The case studies provide an equally compelling story about each student.

What is particularly important is that not every case ends in a wasted life. Reality--even grim reality--is not without hope. In spite of overwhelming odds, many students who have been gravely jeopardized, overcome risk and proceed to lead successful and fulfilling lives.

Jay, who lived in the center of the drug culture of a major metropolitan area, had to contend with the classic problems of a student at risk. He came from a black, low-income family with a history of divorce, alcoholism, and little education. He was fortunate, however, in having a teacher who recognized his ability and his interest in things mechanical. As a result, he attended a select technical/vocational school that specializes in aircraft design and aeronautical electronics. By the time he was in his final semester as a senior, he had not only completed his graduation requirements, but had also received advanced certificates in highly competitive FAA and FCC examination. He displayed his leadership qualities by being the top ranking officer in his school's Reserve Officers Training Corps, and recently received his pilot's wings and was adding to his flying hours.

Although not all, or even a majority, of case histories point to the promising future which many lie ahead for Jay, these success stories are still sources of inspiration. They suggest that hope for many others is justified.

With effective interventions and strong support, many more children and youth whose futures are hostage to "risk" could lead productive and satisfying lives.

Can We Develop an Index or Scale to Identify Students at Risk?

It has long been agreed among educators that early identification of the strengths and weaknesses of individual students is an essential first step to providing appropriate learning experiences to meet their needs. This applies whether the student is gifted, physically or mentally handicapped, or even "average."

In the case of at-risk students, identification usually begins with a definition or list of factors considered to be associated with at-risk behavior. Typically, such lists include five to twelve factors. Many factors are represented across different lists, but the particular group of factors varies from list to list. This is probably accounted for by the differing philosophies, policies, and practices among the communities that have developed their own definitions of at-risk students. Dougherty (1990) has, however, pointed out that, of all 50 states in the United States, 25 had developed formal definitions. Some of these definitions, like the one used by the National Drug Policy Board, an arm of the U.S. Justice Department, focus narrowly on a particular risk. The Board, for example, has identified ten factors that increase a child's vulnerability to drugs.

Most identification programs have, for practical and statistical reasons, selected factors that provide a narrow focus to definitions of risk. This approach is legitimate, given the complexity of human behavior. Some researchers believe, however, that the weakness of a narrow focus is that it does not allow for complete understanding of the needs of an individual student.

The comprehensive approach. Frymier (1989) began by reviewing factors that previous research indicated were associated with risk. His intent was to develop an instrument to measure risk that would be valid but would also be practical for educators to use.

Frymier's review identified a wide range of factors associated with students who leave school before graduation. Typically these factors included data on personal demographic background; academic history; psychosocial components; and significant life events--such as the loss of a parent or sibling, a marital separation, teenage pregnancy, or an arrest arising from drug or alcohol abuse. Frymier paid particular attention to the multifaceted nature of risk, since previous efforts had concentrated on a few academic indicators (for example, reading scores, attendance records, retention in grade, suspensions and expulsions).

In attempting to develop an index of risk, Frymier considered two models: the physiological and the psychiatric. The approach to dealing with coronary heart disease (CHD) illustrates the physiological model. Typically, a patient is assessed to be at risk of heart attack on the basis of the following factors: family history, cholesterol levels, smoking, hypertension, obesity, and level of exercise. The risk associated with each factor is assessed, but so are the interactive effects of several factors. This approach resembles what some school districts are already attempting, although more confidence can perhaps be placed in the factors associated with CHD than those associated with failure to complete school.

Psychiatrists, on the other hand, deal with complexities of human behavior by distinguishing between two aspects of a person's life: predisposing factors (those that develop over a long period of time, usually more than two years) and

short-term life events (six months or less). Examples of the long-term predisposing factors include such experiences as marital discord in a home over a period of years and long-term unemployment. Short-term life events such as the loss of a loved one, divorce, or an unplanned pregnancy illustrate the second category. Psychiatrists presume that short-term life events may accelerate the mental health deterioration of persons with predisposing factors.

The appeal of an index or scale of risk lies in its potential to help identify students soon enough to intervene effectively. Developing such a scale is, however, no easy task; many obstacles must be overcome before a reliable and valid instrument can be constructed. These obstacles notably include the following:

- Every individual is unique. Extreme care must be exercised when interpreting a scale of human behavior, particularly when derived from such an elusive construct as risk. Individuals often react differently to similar circumstances.

- Risk factors vary in severity. For example, a student who has attempted suicide is certainly more at risk than one who has not turned in a homework assignment. Given this variation, the need to weight risk factors is obvious. Frequency complicates matters still more. For example, who is more at risk--the student who failed one course this year, or the student who has been suspended three times this year for disruptive behavior in the classroom but has maintained passing grades?

- All ages are not equally susceptible to risk. A single scale of risk is not appropriate for all ages. The Frymier study, considered in the discussion that follows, dealt with students in grades 4, 7, and 10. Although some risk factors were common to all grade levels, some applied to one or two levels only. Moreover, even when a factor was relevant across all ages, it was not equally threatening at each age level (see the previous point).

These difficulties suggest that any scale or index of risk must be constructed (and interpreted!) with extreme care. The task is feasible, but difficult. Whether a particular scale or index of risk is more useful than a collection of reliable data about an individual student is questionable.

Development of an index or scale. Using the various models discussed previously to organize their thinking about risk, the researchers in the Frymier project began by agreeing on 45 factors that previous research had identified as contributing to risk. The assumption was not that these factors caused risk, but rather that there might be an associative relationship between one or more of the factors and at-risk behavior. If one of the factors were present in a student's life, that factor was assumed to be a symptom of risk that might make the individual more vulnerable to other factors present in the environment.

It was also assumed that different students would cope with and respond to particular experiences and aspects of their environment in different ways. Some students handle the death of a parent reasonably well, whereas others collapse under the burden of such a loss. Some students are spurred to try harder by receiving low grades in school; others are overwhelmed and give up.

Frymier and colleagues then developed five clusters of data about the students through their 45 factors. These clusters were:

- academic failure,
- family socioeconomic status,
- family instability,
- family tragedy, and
- personal pain.

Through longitudinal follow-up of students in the original study, Frymier and his colleagues hope to establish the predictive validity of each cluster by associating them with such dependent variables as dropping out of school, unwanted pregnancies, attempted or actual suicides, and criminal behavior. The purpose of the exercise is to provide educators with an awareness of the multifaceted nature of at risk, so they can not only recognize indicators of risk within a given

cluster but across clusters as well. Development of this scale is incomplete, but is proceeding.

Educators will still need to use their professional judgment about whether certain clusters are more important--as to severity and frequency--than others. Regardless of approach, though, it would seem that the student whose record shows the presence of at least one indicator of risk in each of the five clusters should be monitored carefully and, where appropriate, intervention should occur.

What Are the Difficulties in Collecting Reliable Data?

Collecting reliable data about at-risk behavior turns out to entail difficulties. These difficulties include availability, agreement about which data should be collected, and the orientation of data collections. If nonacademic factors contribute to at risk (and they do), teachers and counselors who do not have access to such information--or do not take the time to seek it--will never know some of the most important factors affecting student learning. Educators in this position are like the man who was looking under the lamp post for his lost key. When a passerby asked, "Is that where you lost the key?" he answered, "No, but the light is better here."

Availability. A number of studies (e.g., Gasright, 1989; Frymier, 1989; Selden, 1988) have found that certain kinds of information are generally not available to teachers and others in schools. There are several reasons why professionals in schools are unable to provide the information: concerns about confidentiality, poor record-keeping practices, differences of opinion about what information is important for teachers to have, administrative convenience, and practical considerations of data gathering.

Researchers have often reported difficulty getting access to information that was perceived as confidential, even though names of individual students were not

part of the record. Confidentiality also pertains to teachers' access to personal information about students. Some observers claim that such information can bias teachers against their students. Others argue that, on the contrary, teachers cannot help students about whom they know very little.

The attitude among some educators that they can deal with the problems of at-risk students by simply analyzing the most readily available data collected by the schools (for example, grades, attendance figures, and test scores) contributes to the lack of data pertinent to risk. Such data are convenient, even though educators know that a parent's loss of job or a student's use of alcohol or drugs may affect learning and behavior dramatically.

Kind of information to be collected. There is no agreement within the profession about the kinds of student data teachers need in order to be effective. Professionals do not agree that a standardized case history or cumulative record form should be maintained on students. Cost, administrative convenience, and school philosophy affect the kind of information a school maintains on each student. These factors influence whether that record is updated periodically, whether it is used regularly by staff, and what disposition is made of it when the student moves to another school or district.

Different orientations of data collections. Researchers and practitioners approach data about students in different ways. The issue is related, again, to confidentiality. Schools have been criticized in recent years for invading students' family privacy by asking too many "personal" questions. As a result, the protection of human subjects is a major issue confronting researchers who work in schools. Researchers must ensure the anonymity of their subjects (students). But they must also try to ensure that the responses are valid: were the students honest in their answers? Self-report data have obvious limits in this respect:

Anonymity means that answers cannot be easily verified, especially when the topics under investigation are sexual behavior, substance use, and other private "controversial" matters.

Teachers, on the other hand, want to know the answer to another question: Who--in particular--are the students who indicated that they smoked or drank or were sexually active? For example, if 34 percent of the students in a middle school reported to researchers that they regularly used drugs, the teachers and administrators want to know which students are involved. Confidentiality obviously prohibits such disclosure of research data.

These differing orientations represent a quandary for the profession. Schools lack the information that might enable them to deal more comprehensively with risk. Researchers are caught in the middle. It is an old issue, but it has not been resolved.

How Do Schools Try to Help At-Risk Students? How Can They Be More Effective?

Children in schools have always been "at risk," as that term is being used today. That is, some children have always confronted difficulties that put them in jeopardy, in school or out. Whatever the shortcomings of society at large and schools in particular, many teachers and administrators have tried to help such youngsters overcome the risks that confront them. Given the attention directed to these problems today, professional efforts are particularly apparent.

Standard approaches. Most high schools have increased requirements for high school graduation. That action may not seem appropriately directed toward at-risk youth, but the belief is widespread that higher standards raise expectations, a necessary precursor to improved learning and higher levels of achievement. The validity of the assumptions aside, raising standards can, depending on how the standards are implemented, encompass efforts to help students who are at risk.

Likewise, teachers and administrators who have raised standards to the point where more students are retained in grade clearly mean to help at-risk students learn more and do better. Although research evidence suggests that retention in grade does not in itself help students learn more, some educators believe that increased retention rates are a necessary adjunct to increased standards and higher expectations. Against the findings of research, these educators set their personal and professional experience of classroom practice.

Other examples, however, suggest a different, but still familiar, approach to risk. Evidence suggests that teachers and administrators regularly try to individualize instruction for students at risk. In their efforts to help at-risk students learn, professionals provide special materials, communicate with parents, emphasize the importance of higher order thinking skills, spend extra time on the basic skills, assign extra homework, provide tutoring, refer students to psychologists or social workers, put students in pull-out programs for special instruction, and place students in small classes. Although such efforts may be more apparent at the elementary and middle school level than at the senior high school level, teachers and administrators at all levels appear to be working energetically, to help young people who are seriously at risk.

Despite these differing efforts, many professionals--especially those who work with children who come from large urban areas and unusually disadvantaged backgrounds--feel that what they are doing is not enough. "We are trying everything," they say, "but our efforts are not effective. We don't know what to do."

Any examination of what teachers and administrators are doing to help young people who are at risk of failing in school or failing in life demonstrates that professionals in the schools <u>are</u>, in general, working very hard, but their efforts

have generally proven to be inadequate and ineffective. Intentions are good, but under the current conditions that characterize schools, teachers and administrators confront serious difficulties.

A different vision of dealing with risk. Apparently, neither increased rigor (raising standards) nor more differentiated instruction (individualization) is sufficient in dealing with risk. Perhaps a different focus is warranted.

For example, rather than manipulating the academic variables further, maybe educators should focus their efforts on the other variables in the child's situation. Students who are at risk--especially those who are seriously at risk--almost never have sufficient opportunity to work closely with and relate meaningfully to an adult who honestly cares about them as human beings. These youngsters need "tender loving care," and they are not getting it--at home, on the playground, on the streets, or at school.

Can educators teach themselves ways to heighten their sensitivities so as to change students' perceptions of them as positive, supportive, and care-giving? Can schools take an assertive role in bringing together the various agencies of the community so that teachers, social workers, officers of the juvenile justice system, religious leaders, recreation officials, and others can develop ways of responding to individual children's problems in a concerted, coordinated, consistent manner? We believe they must.

When institutional turf, bureaucratic organization, and political tussles get in the way, we increase the risks to which vulnerable young people are prone. Nearly everyone acknowledges that communities provide services to young people in a fragmented way. Yet children are more than "cases" to be "managed" by this or that institution. They are complex human beings, with the innate imperative to grow, develop, and unfold who they will be. The mission of education is to

nurture this growth responsively in order to influence life outcomes for the best. To this end, much in our schools needs to change.

REFERENCES

Dougherty, J. W. (1990). Effective program for at-risk adolescents (Fastback Series Number 308). Bloomington, IN: Phi Delta Kappa Educational Foundation.

Evans, S. A. (1984). Dropout prevention: staff development program. Jackson, MS: Mississippi State Department of Education.

Frymier, J. (1989). A study of students at risk: Collaborating to do research (Phi Delta Kappa Monograph Series). Bloomington, IN: Phi Delta Kappa Educational Foundation.

Frymier, J., & Robertson, N. L. (1990). Students at risk: What are they like? Unpublished manuscript.

Gastright, J. F. (1989). Don't base your dropout program on somebody else's problem. Bloomington, IN: Phi Delta Kappa Center on Evaluation, Research and Development.

Rutter, M. (1980). Changing youth in a changing society: Patterns of adolescent development and disorder. Cambridge, MA: Harvard University Press.

Selden, R. W. (1988). Missing data: A progress report form the states. Phi Delta Kappan, 69, 492-494.

Schorr, L. B., & Schorr, D. (1987). Within our reach. New York: Anchor Books.

Troob, C. (1985). Longitudinal study of students entering high school in 1979: The relationship between first term performance and school completion. New York: New York City Board of Education.

U. S. Department of Commerce, Bureau of the Census. (1987). Money Income and poverty status in the United States: 1987. Washington, D.C: U.S. Government Printing Office.

ANNOTATED BIBLIOGRAPHY: MAIN ENTRY SECTION

How to use this bibliography. Documents annotated in this bibliography are available from several sources. First, they can be ordered directly from the clearinghouse that published them. Please consult the directory at the end of this publication for current clearinghouse addresses and telephone numbers.

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Ascher, C. (1988a). Grade retention: Making the decision (Digest No. 46). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 304 498)

This digest discusses effective curricula to eliminate the need to retain failing students, criteria for effective retention, negative effects of retention, and possible bias in the selection of students to retain.

Ascher, C. (1988b). Improving Chapter 1 delivery (Digest No. 39). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 292 940)

This digest summarizes the various instructional methods for delivering Chapter 1 services to disadvantaged students. Pull-out programs predominate, but research has shown they aren't the most effective options. Flexible programs are more successful. Local, state, and Federal laws may be barriers to providing flexible service delivery, however.

Ascher. C. (1988c). Improving the school-home connection for low-income urban parents (Digest No. 41). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 293 973)

Although poor, urban parents want to participate in their children's education as much as middle-class parents do, their involvement is compromised by a variety of factors both in the home and in the school. This digest includes ways school personnel can facilitate involvement.

Ascher, C. (1988d). The mentoring of disadvantaged youth (Digest No. 47). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 306 326)

In light of increased use of planned mentoring programs to link disadvantaged youth with someone older and more experienced, this digest reviews types of programs, successful mentoring techniques, and criteria for effective pairing. Mentoring is a modest intervention, but it can provide some youth with improved social opportunities.

Ascher, C. (1988e). Summer school, extended school year, and year-round schooling for disadvantaged students (Digest No. 42). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 298 213)

Recent research shows no significant educational benefits from any of these options. Educators, however, continue to hope that each can be useful in addressing the severe problems of disadvantaged students. The discussion identifies the shortcomings of each option.

Ascher, C. (1987a). Chapter 1 programs: New guides from the research (Trends and Issues No. 7). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 289 947)

This document reviews the findings of 10 commissioned reports on the implementation and success of Chapter 1 programs. Although conclusions vary, the reports identify similar problems with equity, efficacy, and student selection that limit program success.

Ascher, C. (1987b). Trends and issues in urban and minority education, 1987 (Trends and Issues No. 6). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 287 972)

Using current literature, this document presents a profile of urban students, including ethnicity and achievement. It describes current programs and practices in urban schools, with particular attention to the needs of minority, at-risk, and immigrant students. It also includes a discussion of the roles of parents and business in education.

Ascher, C. (1985a). Improving schooling to reduce teenage pregnancy (Digest No. 28). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 269 517)

This digest discusses the various educational strategies from preschool to high school that may affect the pregnancy rate, ethnic differences in the rate, and the short- and long-term effects of early pregnancy. Preschool education, educational aspirations, and appropriate job training seem to correlate positively with a reduction in delinquency and teenage pregnancy.

Ascher, C. (1985b). Pregnant and parenting teens: Statistics, characteristics, and school-based support services (Trends and Issues No. 1). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 267 150)

This research review covers data on the range and effectiveness of school-based programs for pregnant and parenting teenagers and presents a profile of the population. In general, programs reach only a small percentage of the targeted population, and efforts must be made to lower the dropout rate. Counseling programs and programs for the parents of pregnant teens must be implemented to provide students with information on the nature and responsibilities of parenting.

Ascher, C., & Flaxman, E. (1988). The delivery and organization of compensatory education (Trends and Issues No. 9). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 306 338)

This document synthesizes recent evaluations of Federal compensatory education programs for at-risk students in high poverty area schools. Reviews suggest that the predominant program structure--pullout classes for low-ability students--is not as effective as heterogeneous cooperative learning would be. The reviews also suggest that the poverty status of the school, rather than student achievement, should be considered the primary criterion for targeting services.

Ascher, C., & Schwartz, W. (1989). School-college alliances: Benefits for low-income minorities (Digest No. 53). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 308 277)

This digest reviews the various types of collaborations that have been implemented recently, identifies problems with the process, and presents a set of issues that need to be resolved in order to encourage the success of a collaboration.

Ascher, C., & Schwartz, W. (1987). Keeping track of at-risk students (Digest No. 35). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 285 961)

Given the importance of accurately identifying potential dropouts, counting dropouts, and developing consistent criteria for defining them, this digest presents a checklist of categories of dropouts and identifies other categories of students who should not be considered dropouts.

Asher, S. R., Williams, G. A., Burton, C. B., & Oden, S. (1987). Children's social development: Information for teachers and parents. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 283 625)

This document is comprised of three papers, an annotated bibliography, and an ERIC computer search reprint, all of which cover aspects of children's social development. Aspects include children's peer relationships, strategies for parents and teachers to help children relate to peers more effectively, and the developmental stages of children's social competence.

Backler, A., & Stoltman, J. (1986). The nature of geographic literacy (ERIC Digest No. 35). Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 277 601)

This digest discusses the fundamental themes of geography, defines basic geography skills, and considers the likely learning outcomes if students are provided with skills that improve their geographic literacy.

Barker, B. O. (1987). Interactive distance learning technologies for rural and small schools: A resource guide (ERIC Mini-Review). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 286 698)

In remote and isolated schools where a certified teacher is not always available, or in small schools where limited student enrollments make hiring teachers for low-incidence courses cost-prohibitive, distance learning options may be a good alternative. This digest describes several approaches to distance learning: (1) satellite transmissions, (2) two-way interactive television, (3) Instructional Television Fixed Service, (4) audio-graphic teleconferencing; and (5) multi-media equipped buses for in-transit studying. The discussion treats the related issues of initial costs, annual fees, and maintenance. The review also includes 22 program addresses with telephone numbers.

Barnitz, J. G. (1985). Reading development of nonnative speakers of English: Research and instruction (Language in Education: Theory and Practice, No. 63). Washington, DC: Center for Applied Linguistics & ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 256 182)

This report reviews the reading process and the development of native and second language reading skills. It considers teaching strategies applicable to first and second language learning, and to both, as well as the related needs of teacher education programs.

Barron, L., Bransford, J., Corbin, B., Goin, L., Goldman, E., Goldman, S., Hasselbring, T., Kinzer, C., Risko, V., Sherwood, R., Sturdevant, T., Vye, N., Williams, S., & Young, M. (1989). Enhancing learning in at-risk students: Applications of video technology (ERIC Digest EDO-IR-89-12). Syracuse: ERIC Clearinghouse on Information Resources. (ERIC Document Reproduction Service No. ED 318 464)

This digest discusses the benefits of using a contextualized learning environment to teach at-risk students. It demonstrates the advantages of videotape and random access videodisc technologies, and describes how the anchored instruction projects at Vanderbilt's Learning Technology Center demonstrate the effectiveness of this teaching method.

Beekman, N. (1987). The dropout's perspective on leaving school (Highlights: An ERIC/CAPS Digest). Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 291 015)

This factsheet considers the dropout's point of view on leaving school: reasons for dropping out, life after leaving school, and dropouts' evaluation of their decisions to leave school. It identifies a dislike of school, low academic achievement, and a desire to work as key reasons for dropping out.

Bempechat, J., & Ginsburg, H.P. (1989). Underachievement and educational disadvantage: The home and school experience of at-risk youth (Urban Diversity Series No. 99). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 315 485)

About 30 percent of the school population is at risk of failure as a result of insufficient educational experiences in the home, school, or community. This document reviews the demographic factors associated with at-risk status and discusses effective educational strategies for disadvantaged students.

Bempechat, J., Stauber, H., & Way, N. (1989). Teenage pregnancy and drug abuse: Sources of problem behavior (Digest No. 58). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 316 615)

These problem behaviors are both a cause and a result of school failure and subsequent dropping out. This digest discusses criteria for distinguishing between drug use and abuse; influences that affect early pregnancy; and the negative effects on adolescents of these behaviors.

Bempechat, J., & Wells, A. S. (1989). Trends and issues in urban and minority education, 1989: Promoting the achievement of at-risk students (Trends and Issues No. 13). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 315 484)

This document, comprised of four essays, reviews recent studies on the influence of classroom environment; curriculum tracking; child, parent, and teacher beliefs; and middle school environment on the achievement of high risk students.

Bleuer, J. C. (1988). Counseling underachievers: A comprehensive model for intervention. Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 304 631)

This digest develops a comprehensive model for improving counseling interventions with underachievers, based on an analysis of literature in the ERIC database. It discusses a redefinition of the school counselor's role, describes the model itself, and suggests uses of the model in both individual and group counseling.

Bleuer, J. C. (1987). Counseling underachievers: A counselor's guide to helping students improve their academic performance. Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Management, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 286 112)

This guide presents a first step in the development of a comprehensive, systematic approach to counseling students for academic achievement. It emphasizes the need for counselors to place a high priority on, and enhance their skill in, academic achievement counseling; for identifying practical applications from research findings; for developing a model for counselor intervention; and for additional research. Also included are a six-step counselor intervention process, an action plan for overcoming achievement barriers, and tips for taking notes.

Bleuer, J. C., & Schreiber, P. A. (Eds.). (1989). Counseling young students at risk: Resources for elementary guidance counselors (1st ed.). Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 307 524)

This collection of papers addresses critical problems that can place students at risk: "latchkey" situations, stress, parents' divorce, family alcoholism, sexual abuse, and death and loss. Also discussed are numerous esteem-enhancing resources that can lead to long-term rewards in adjustment and achievement.

Blum, M. E., & Spangehl, S. D. (1982). Developing educational programs for the high-risk secondary school and college student (Urban Diversity Series No. 80). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 223 762)

This document examines characteristics of high risk students, institutional problems related to their presence in schools, and various solutions to these problems that have been implemented at the secondary, junior college, and college levels. Differences in learning style and ability between high risk and other students are covered, and model programs for secondary and postsecondary levels are described.

Boloz, S. A., Hickman, D., & Loughrin, P. L. (1987). Just beyond your fingertips: American Indian children participating in language development. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 281 698)

This publication describes the development, implementation, and success of the Ganado Language Arts Development (GLAD) Project on the Navajo reservation in northeastern Arizona. GLAD develops the foundation for literacy in each student, expands and enriches staff's competencies in teaching language arts, and develops and strengthens parental awareness and support for school programming. Topics treated include the development of the project, ideas for grades K-3, writing across the curriculum, and teachers' attitudes about writing, among others. The book also includes sample reproductions of students' writing (paragraphs, poems, posters) and sample writing exercises and worksheets.

Brescia, W., & Fortune, J. C. (1988). Standardized testing of American Indian students (ERIC Digest EDO-RC-88-15). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 813)

The use of standardized achievement, aptitude, ability, and intelligence tests with American Indian students is a cross-cultural application likely to underestimate student performance. This digest discusses requirements for obtaining accurate scores and requirements for test interpretation. Valid and reliable testing requires that students (1) have experiences assumed in the test design, (2) have opportunities to develop requisite skills, (3) value successful test performance, and (4) understand instructions and time requirements.

Burge, P. L. (1987). Career development of single parents (Information Series No. 324). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 290 934)

Because single parent families are subject to extreme economic problems, working parents, especially displaced homemakers, need special career development and vocational preparation. This paper discusses the features of effective career programs for this population and provides examples of successful programs.

Cajete, G. A. (1988). Motivating American Indian students in science and math (ERIC Digest EDO-RC-88-02). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 812)

This digest identifies motivational, attitudinal, and behavioral influences that make science and math less attractive to American Indian students than to other students. The discussion provides suggestions for overcoming impediments in appropriate ways, and for responding to the needs and learning styles of American Indian students.

Christian, D. (1987). Vernacular dialects in U.S. schools (ERIC Digest). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 289 364)

The two positions that characterize the controversy over use of nonstandard dialects in school are discussed. The "deficit" position maintains that speakers of vernaculars have a cognitive or language handicap. The "difference" position argues that no dialect is inherently better than another, although students' language and cultural background can influence their chances of academic success. Guidelines are offered for schools teaching standard English.

Cohen. C. B. (1986). Teaching about ethnic diversity (ERIC Digest No. 32). Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 273 539)

This digest discusses how educators can accurately and fairly depict the rich ethnic diversity of the United States, in light of the new wave of immigrants, and, at the same also teach core values of a common American heritage. It presents seven approaches.

Crandall, J. A. (Comp.). (1987). ESL through content-area instruction: Mathematics, science, social studies (Language in Education: Theory and Practice, No. 69). Washington, DC: Center for Applied Linguistics & ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 283 387)

The three essays that comprise this document focus on integrating subject matter (math, science, and social studies, respectively). The discussion includes the techniques of English instruction used to communicate subject matter to LEP students. Each essay includes instructional strategies, curriculum, and effective methods of integration.

Dale, T. C. (1986). Limited-English-Proficient students in the schools: Helping the newcomer (ERIC Digest). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 279 206)

This digest presents ways for school administrators to help provide LEP students and their families with a network of support to help them adapt to school. Administrators should provide cultural training for staff, develop appropriate assessment methods, create intensive English instruction programs, and encourage parent participation.

Donnelly, M. (1987). At-risk students (ERIC Digest Series No. 21). Eugene: ERIC Clearinghouse on Educational Management, University of Oregon. (ERIC Document Reproduction Service No. ED 292 172)

This pamphlet describes the characteristics of at-risk students and discusses evaluation instruments to identify them. During a period of Federal cutbacks in education (11 percent between 1980 and 1987), there was a 20 per cent increase in the number of disadvantaged students. The publication suggests that successful programs that provide social services for such students raise their self-esteem through personal contact with a qualified and caring staff.

Edington, E. D., & Koehler, L. (1987). Rural student achievement: Elements for consideration (ERIC Digest). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 289 658)

Recent research finds little difference between rural and urban students in either academic achievement or educational aspirations. Moreover, rural students who do attend college make adequate grades there, even though in high school they had less total access to educational information. It could be argued that rural high school students are--in terms of their overall progress--achieving more, not less. This digest argues that the rural deficit model may be outdated.

Egertson, H. A. (1987). The shifting kindergarten curriculum. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 293 630)

Kindergarten curriculum now includes direct teaching of discrete skills with specific expectations for achievement, in contrast to the play-oriented setting of the past. The new curriculum is less responsive to wide ranges in age and ability, and some schools are thus retaining kindergarten students for another year. An alternative is a child-centered, active-learning approach that allows children to move forward according to the time table of their own development, to develop linguistic competence through appropriate language experiences with adults and peers, and to have adequate time to complete projects.

Escamilla, K. (1989). A brief history of bilingual education in Spanish (ERIC Digest EDO-RC-89-10). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 055)

This digest gives educators a brief review of the history of American bilingual education in Spanish from the end of the 1950s onward. The discussion reviews post-Sputnik developments and the effect of immigration from Cuba; passage in 1968 of the Title VII Bilingual Education Act; the 1974 Supreme Court decision, Lau v. Nichols; and developments in the 1980s.

ERIC Clearinghouse on Adult, Career, and Vocational Education. (1988a). Access and equity in vocational education (Trends and Issues Alerts). Columbus, OH: Author. (ERIC Document Reproduction Service No. ED 307 381)

This document discusses Federal vocational education legislation in support of increased vocational education opportunities for special populations, and bases of future policy to support access. It also lists additional resources on the topic.

ERIC Clearinghouse on Adult, Career, and Vocational Education. (1988b). Career education for the Limited English Proficient (Trends and Issues Alerts). Columbus, OH: Author. (ERIC Document Reproduction Service No. ED 307 380)

This overview of career education for LEP persons discusses the fact that the projected shortage of young workers will force employers to hire LEP individuals. The increasing demand for more highly skilled workers indicates that LEP individuals be provided with career counseling and career education so they can qualify for available jobs. The document includes a list of additional resources on the topic.

ERIC Clearinghouse on Adult, Career, and Vocational Education. (1988c). The role of vocational education at the secondary level (Trends and Issues Alerts). Columbus, OH: Author. (ERIC Document Reproduction Service No. ED 296 171)

Recent educational reforms have resulted in less vocational education instructional time. However, an increasing number of at-risk students could benefit from job-specific training. This document considers related issues in the debate over academic versus vocational education in high school.

ERIC Clearinghouse on Educational Management, University of Oregon. (1986a). Communicating expectations for academic achievement (The Best of ERIC on Educational Management, No. 84). Eugene: Author. (ERIC Document Reproduction Service No. ED 290 234)

The 10 articles in this annotated bibliography focus on the principal's role in communicating high expectations for student achievement through support of effective teaching, instructional leadership, maintenance of a positive and consistent school environment, establishment of high academic standards, and active encouragement of exemplary teacher and student performance.

ERIC Clearinghouse on Educational Management, University of Oregon. (1986b). Identifying at-risk students (The Best of ERIC on Educational Management, No. 85). Eugene: Author. (ERIC Document Reproduction Service No. ED 275 053)

This annotated bibliography consists of 12 publications that discuss various aspects of at-risk students. The publications cover studies of programs conducted in several states to improve the achievement of at-risk students and to prevent their dropping out. The publications include analyses of effective policies.

ERIC Clearinghouse on Educational Management, University of Oregon. (1986c). Preventing dropouts (The Best of ERIC on Educational Management, No. 83). Eugene: Author. (ERIC Document Reproduction Service No. ED 268 666)

This annotated bibliography of 12 publications covers various aspects of dropping out of school, including reasons why students leave, characteristics of effective programs, the necessity for early identification of at-risk students, and school restructuring options, such as a longer time frame in which students can complete their studies.

ERIC Clearinghouse on Languages and Linguistics. (1983). From the classroom to the workplace: Teaching ESL to adults. Washington,DC: ERIC Clearinghouse on Languages and Linguistics & the Center for Applied Linguistics. (ERIC Document Reproduction Service No. ED 227 694)

This document presents guidelines for teaching ESL quickly and efficiently to adults. It covers ESL instruction based on teaching competencies, teaching ESL to nonliterate adults, vocational ESL, ESL instruction in the workplace, ESL teaching in the multilevel classroom, and coordinating and training volunteer tutors.

ERIC Clearinghouse on Urban Education. (1986). Second-chance opportunities for Hispanic dropouts (Digest No. 50). New York: Author. (ERIC Document Reproduction Service No. ED 306 337)

This digest presents the major points of a study by the Hispanic Policy Development Project, "Too Late to Patch: Reconsidering Second-Chance Opportunities for Hispanic and Other Dropouts." The study describes various programs that can benefit the 1.8 million Hispanic youths, aged 18-24, who left school without adequate preparation for entry into the labor force. The discussion pays particular attention to the needs of inner city youth.

Flaxman, E., Ascher, C., & Harrington, C. (1988). Youth mentoring: Programs and practices (Urban Diversity Series No. 97). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 308 257)

This monograph reviews the literature on mentoring for adult and youth populations for the purpose of applying experience to the development of mentoring programs for at-risk youth. Covering natural and planned mentoring, it examines the psychological bases of the mentoring process and the social values inherent in the mentoring process. It also places mentoring in the context of larger intervention programs and includes policy recommendations.

Florey, J., & Tafoya, N. (1988). Identifying gifted and talented American Indian students: An overview (ERIC Digest EDO-RC-88-14). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 810)

A 1982 study revealed that American Indians comprise 0.8 percent of public school students, but only 0.3 percent of those participating in gifted programs, whereas the respective figures for white students are 73.3 percent and 82 percent. This digest reviews possible reasons for and solutions to this underrepresentation, including the use of multiple identification methods.

Freeman, D., & Freeman, Y. (1988). Sheltered English instruction (ERIC Digest). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 301 070)

This digest describes sheltered English instruction. In this program model, LEP students learn English in classes comprised only of other LEP students, where they need not compete academically with native English speakers. Teaching methods include extralinguistic cues, linguistic modifications, interactive lectures, cooperative learning techniques, focus on central concepts rather than on details, and development of reading strategies (mapping).

George, K. R. (1987). A guide to understanding gifted American Indian students. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 284 715)

This guide emphasizes identification of students who do not manifest high abilities in ways recognized by the dominant culture. Such students are at risk of being excluded from gifted programs. Case studies illustrate issues in the identification of gifted and talented American Indian children and the development of appropriate programs that respond to individual needs and cultural values. An appendix includes a list of 43 tests that have been used successfully to evaluate and identify gifted American Indian students.

Griffin, A., & Fein, G. (1988). Infant day care: The critical issues (ERIC Digest). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 301 362)

This digest discusses the quality of infant day care with respect to structural features (group size, staff-child ratios, etc.), dynamic aspects (experiences, interaction), and contextual features (staff stability, setting). It cites studies showing that while day care may benefit low-income children, its effects on middle-class children are less clear. Research findings on socioemotional development are not unanimous. The digest also discusses attachment in terms of the controversy about day care for infants, including research about mothers who work outside the home and those who do not.

Harrison. C. (1986). Bilingual vocational education for immigrants. Overview (ERIC Digest No. 49). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 268 302)

Vocational ESL provides adult immigrants with English skills, as needed, in cooperation with a vocational education program. This digest describes instructional methods that include activities to promote acculturation. It also discusses how work experience can provide training in employability skills.

Herbert, D. (1983). Counseling youngsters for stress management (Highlights: An ERIC/CAPS Fact Sheet). Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 287 139)

This fact sheet addresses stress management for children and adolescents in schools. Relaxation training for young people is discussed. The implementation of a relaxation training program is also considered, including personnel, time, materials, and basic relaxation procedures. A sample stress management model for secondary students is presented.

Hills, T. W. (1987). Screening for school entry. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 281 607)

Screening programs are now widely used at school entry to identify those who may be unable to meet academic expectations in the future or who may have special learning needs. Measures should be inexpensive, brief, simple to administer, and easy to interpret. This document considers ways to improve the value and effectiveness of screening.

Honig, A. S., Wittmer, D. S., & Gilbralter, J. C. (1987). Discipline, cooperation and compliance: An annotated bibliography. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 287 592)

This bibliography includes research studies about discipline, compliance, and cooperation in homes, schools, and child care settings. It also includes practical materials about (1) effective discipline; (2) classroom management techniques for teachers, day care workers, and school administrators; and (3) home management techniques for parents.

Hornick, K. (1986). Teaching writing to linguistically diverse students (Digest No. 32). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 275 792)

This digest presents strategies demonstrated effective in the teaching of writing to students who speak nonstandard English. Emphasis is on one-to-one instruction, regular practice across the curriculum, and flexible student evaluations.

Howley, C. (1989a). Economic support for education in rural school districts (ERIC Digest EDO-RC-89-4). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 059)

The benefits of steady urban economic growth have not been shared, generally, by rural areas, and the situation has led to inadequate financial support for rural schools. This digest synthesizes research characterizing the economic climate in which rural schools operate and reports on the traditional strategies used to create greater economic support for rural school districts. To fund and preserve rural schools, some observers have proposed a typology that accounts for diversity among all school districts.

Howley, C. (1989b). The impact of rural industries on the outcomes of schooling in rural America (ERIC Digest EDO-RC-89-7). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 058)

This digest reviews research that has investigated the impact of farming, manufacturing, and mining on educational outcomes in rural America. Although this complex topic needs more study, current research suggests that agriculture may have a positive effect on outcomes, manufacturing seems to have mixed outcomes, and the effect of mining may be negative.

Howley, C. (1989c). What is the effect of small-scale schooling on student achievement? (ERIC Digest EDO-RC-89-6). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 062)

Historically, larger school size has been viewed as an important educational reform that helps schools operate more cost effectively. Early studies that recommended increases in school and district size were based on research about input variables. On the other hand, early studies based on output data did not recommend such increases. More recent studies suggest that, when socioeconomic status is controlled, small schools have a positive effect on student achievement. The most recent research suggests that, among impoverished communities, small schools produce substantially better achievement than large schools.

Hudelson, S. (1988). Children's writing in ESL (ERIC Digest). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 303 046)

Since the process of writing is similar for both first- and second-language learners, writing instruction in the ESL classroom should include opportunities for students to write and create meaning while they are learning English, to respond to the writing of others, and to use writing to carry out tasks that are meaningful to them.

Imel, S. (1989). Nontraditional occupations: A status report (Trends and Issues Alerts). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 304 564)

The number and percentage of females enrolling in traditionally male programs are increasing, as is the opposite. Nevertheless, sex bias and stereotyping persist, and students face a range of problems. These include lack of support at home and in school, lack of counseling, lack of role models, and poor job placement. In addition to discussion of the topic, the document lists resources available from the ERIC system.

Imel, S. (1986). Correctional education: Selected aspects (Overview, ERIC Digest No. 58). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 275 888)

This digest discusses educational activities in correctional institutions, many of which are the result of litigation. Lack of funding and other resources hamper programs, but vocational training can reduce recidivism.

Interstate Migrant Education Council. (1988). Special education for migrant students. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 294 703)

Migrant students who need special education are at a disadvantage in our nation's tradition-based schools. Even when migrant students are placed properly, the time-consuming task of developing an individualized education plan is often disrupted by a move to a new school. This report calls for better intra- and interstate data coordination, as well as additional efforts to recruit eligible migrant students.

Jacob, E., & Mattson, B. (1987). Cooperative learning with Limited-English-Proficient students. Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 287 314)

The cooperative learning method, which involves small groups of two to six students in interdependent tasks, is particularly effective with LEP students. This document describes various techniques and the situations in which each may best be employed.

Johnson, F. C., Level, R. H., Morales, J. A., Morse, S., & Prokop, M. (1986). Migrant students at the secondary level: Issues and opportunities for change. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 270 242)

This report reviews the needs of adolescent migrant youth, provides an overview of existing programs and strategies that address their needs, and offers recommendations for improving secondary programs. The report discusses affective, cognitive, program, counseling, and community needs and illustrates their application with four hypothetical migrant students. It also includes a variety of recommendations for program improvement, an extensive bibliography, and information for contacting others, both in footnotes and in an Appendix.

Jordan, J. (Ed.). (1988). Early childhood special education: Birth to three. Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children, The Council for Exceptional Children. (ERIC Document Reproduction Service No. ED 302 964)

This book is comprised of 12 papers, each by a different author, that address current issues in service delivery to infants and toddlers with handicapping conditions, with respect to the legislative mandate of Public Law 99-457, the Education of the Handicapped Act Amendments of 1986. Topics covered include linking screening with curriculum, parent involvement, and administrative challenges. The book describes model programs and discusses implementation of the legislation.

Katz, L. G. (1987). What should young children be learning? (ERIC Digest). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 290 554)

Two dimensions of development, normative and dynamic, are considered with respect to curriculum and teaching strategies for early childhood education. Four categories of learning are identified: knowledge, skills, feelings, and dispositions. Children learn most effectively when engaged--in an informal classroom setting--in small group interaction with materials and with their surroundings.

Katz, L. G., Raths, J. D., & Torres, R. T. (1987). A place called kindergarten. Urbana: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 280 595)

This report evaluates a school district's progress in understanding the goals and problems of kindergarten education by examining the conflicting claims, views, and assertions concerning its program; and the program itself. Information was obtained from the community, parents, school board members, central district staff, teachers, and principals.

Kerka, S. (1989). Retaining adult students in higher education (ERIC Digest No. 88). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 308 401)

This digest reviews research on university retention of adults. It includes a review of retention models, a list of situational factors and psychological influences affecting adult student persistence, and indicates which services and interventions can most effectively help to alleviate problems.

Kerka, S. (1988a). Strategies for retaining adult students: The educationally disadvantaged (ERIC Digest No. 76). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 299 455)

Educationally disadvantaged adults are more likely to lack self-confidence, self-esteem, and basic skills. Adult educators should identify which types of retention efforts are most likely to work with this population and concentrate on them. The digest includes descriptions of successful adult basic education programs.

Kerka, S. (1988b). Single parents: Career-related issues and needs (ERIC Digest No. 75). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 296 123)

This digest identifies the special employment-related needs of low-income single parents (primarily women) and describes specific program features to address such needs. In addition to vocational counseling, these individuals may need day care, parenthood education, and skills training.

Kerka, S. (1987). Parents' role in transition for handicapped youth. (Overview, ERIC Digest No. 62). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 282 093)

The role of parents in the transition from school to work is important for all students, but it is critically important for handicapped youth. Parents' guidance is needed in the areas of career exploration, job search, independent living skills, and collaboration with educators and other service providers. This digest describes specific ways that parents can be helpful.

Kerka, S. (1986). Deterrents to participation in adult education (Overview, ERIC Digest No. 59). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 275 889)

This digest discusses the various influences that prevent adults from entering educational programs, and suggests ways for educators to help them overcome the obstacles. It also presents recruitment strategies for adults in general and for several specific populations.

Kidwell, C. S. (1986). Motivating American Indians into graduate studies. ERIC Digest. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 286 703)

There are no quick and easy tips to motivating American Indian students into graduate education. A number of factors determine a student's commitment to graduate training. Any attempt to motivate students by addressing one of these factors must be undertaken with the awareness that all are related. This digest summarizes what those involved with educators and tribes can do. Most of all, tribes have to see the development of human resources as a vital part of their long-range development plans.

Kirby, K. (1989). Community service and civic education (ERIC Digest). Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 309 135)

Students at every educational level can participate in community service activities. In such activities, students are contributing needed resources not provided by the government. They are also developing a wide range of social science skills and strengthening their bonds to the community. This digest presents 14 characteristics of exemplary community service projects.

Klauke, A. (1988). Stopping drug abuse (ERIC Digest Series Number EA32). Eugene: ERIC Clearinghouse on Educational Management, University of Oregon. (ERIC Document Reproduction Service No. ED 301 968)

Using a question and answer format, this digest discusses the issue of stopping drug abuse as a national priority. The discussion considers the roles that schools can play in implementing prevention programs. Five phases in the development of a comprehensive, long-term program, integrated into overall school curricula and policy, are presented.

Kleifgen, J. A. (1989). Computers and opportunities for literacy development (Digest No. 54). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 311 120)

This digest discusses ways that computer education can develop language and literacy skills in students who have difficulty with traditional teaching methods. Dramatic linguistic and academic improvements have been demonstrated by students given access to software for word processing, problem solving, and communications. Attention must be paid to the equitable distribution of equipment. In the past, the way computer technology has been allocated has contributed to widening the gap between advantaged and disadvantaged students.

Kress, R. (1988). Some caveats when applying two trends in diagnosis: Remedial reading (ERIC Digest No. 6). Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. (ERIC Document Reproduction Service No. ED 297 303)

This digest explores two trends in diagnosing remedial readers: informal assessment, including informal reading inventories, and computerized diagnosis. Whichever diagnosis is used, it must be customized in order to accurately place students and provide them with appropriate instruction.

Lachance, L. (1988). Alcohol and drug use among adolescents (Highlights: An ERIC/CAPS Digest). Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 304 628)

This digest describes the incidence of alcohol and drug use among adolescents, the causes of substance abuse, and theories of sequential drug use. It discusses the role of the school in substance abuse prevention and intervention activities, and recommends ways to plan prevention programs.

Lachance, L. (Comp.). (1984). Adolescent substance abuse: Counseling issues (In Brief: An Information Digest from ERIC/CAPS). Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, School of Education, University of Michigan. (ERIC Document Reproduction Service No. ED 260 364)

This digest defines drug abuse and examines ensuing family problems, methods of intervention and treatment, school related problems, and prevention of chemical dependency.

Lopez-Valadez, J. (Ed.). (1985). Immigrant workers and the American workplace: The role of voc ed (Information Series No. 302). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 260 304)

The four chapters in this compilation highlight issues and strategies used to prepare LEP adults for employment: teaching English for various specific purposes, including skills development; the ways that cultural values are reflected in language and behavior; meeting the diverse training needs of LEP students; and providing them with employment services.

Luhman, A., & Fundis, R. (1989). Building academically strong gifted programs in rural schools (ERIC Digest EDO-RC-89-3). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 060)

Talented students whose needs for rapid-paced or advanced studies may not be met can be considered at risk in rural schools. Programs for gifted students should address substantive academic goals, including: (1) bringing students' achievement closer to full potential; (2) ensuring that gifted students in outlying schools are identified and have access to appropriate services; and (3) improving access to advanced courses for talented high school students. This digest offers resource ideas for rural educators.

Lunon, J. K. (1986). Migrant Student Record Transfer System: What is it and who uses it? (ERIC Digest). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 286 700)

This digest describes the Migrant Student Record Transfer System, a nationwide computerized information network. Founded in 1969, the network records, maintains, and rapidly transfers educational and health information about identified migrant children in 29 states, the District of Columbia, and Puerto Rico. Discussion considers the prevalent use of the system, describes training activities of the system, and notes sources of additional information.

Lyman, L., & Foyle, H. C. (1988). Cooperative learning strategies and children. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 306 003)

This digest discusses reasons for using cooperative learning approaches in preschool centers and primary school classrooms, ways to implement the strategy, and the long-term benefits for children's education. Early childhood educators can use many existing strategies to encourage cooperation and interaction in older children. Ten steps for implementing cooperative learning activities are listed.

Marinez, D. I., & Ortiz de Montellano, B. R. (1988). Improving the science and mathematics achievement of Mexican American students through culturally relevant science (ERIC Digest EDO-RC-88-7). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 819)

A culturally relevant science and math curriculum provides materials to help students (1) develop pride in their culture's contribution to science, (2) learn science from a familiar cultural base, (3) consider science as a career, and (4) recognize the importance of science in their lives. This digest describes a project to develop workshops about the use of culturally relevant materials and activities for different grade levels.

Mattera, G. (1987). Models of effective migrant education programs. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 294 704)

Intended to encourage both migrant educators and other educators to explore the possibilities of adopting or adapting the cited programs into their own units, this volume updates the 1974 description of some of the many effective programs serving migrant students. Selected programs come from the National Diffusion Network and the Chapter 1 National Identification Program, as well as from exemplary national programs, interstate programs, statewide programs, local programs, and special services. The guide also offers suggestions to help citizens become active in the struggle to improve the education of migrant students.

Mestre, J. (1989). Hispanic and Anglo students' misconceptions in mathematics (ERIC Digest EDO-RC-89-9). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 313 192)

Hispanic students display some unique mathematical error patterns resulting from differences in language or culture. In addition, linguistic difficulties increase the frequency with which Hispanic students make the same errors as Anglo students. Since students will not easily give up their misconceptions, lecturing them on a particular topic has little effect. Instead, teachers must help students to dismantle their own misconceptions. This digest discusses the nature of misconceptions, and provides guidelines for helping students overcome them.

Miller, S. L. (1988). Economic education for citizenship. Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education; San Francisco: Foundation for Teaching Economics; and Bloomington, IN: Social Studies Development Center. (ERIC Document Reproduction Service No. ED 296 947)

This book considers the role of economics education in the development of citizenship skills. It covers economic literacy, instructional methods, curriculum content, textbooks and other classroom materials, and the status of economics education in grades k-12.

Naylor, M. (1989a). Retaining at-risk students in career and vocational education (ERIC Digest No. 87). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 308 400)

This practice-application digest addresses ways that vocational education can reduce the dropout rate (of nearly 30 percent) among students. Vocational educators should motivate at-risk students by shifting from a subject-focused to a career-focused curriculum. Practical advice on how best to meet these students' needs is offered.

Naylor, M. (1989b). Implications of research on displaced workers (ERIC Digest No. 80). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 305 493)

This digest addresses worker displacement as a phenomenon that is more closely related to structural features of firms than to the characteristics of the individuals who lose their jobs. The most successful programs emphasize reemployment over retraining and involve the cooperation of labor and management in the provision of a broad range of services. Educational institutions can best serve the needs of displaced workers by developing comprehensive programs linked closely with private and public organizations that act as employment agencies.

Naylor, M. (1987). Reducing the dropout rate through career and vocational education (ERIC Digest No. 63). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 282 094)

Major concentration in a vocational program can promote student retention. This digest describes effective methods of working with students and their parents to help students develop skills needed for work after graduation and to help make the transition to the work world.

Naylor, M. (1985). Role of vocational education in transition services for handicapped youth (ERIC Digest No. 47). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 259 217)

This digest discusses the role of vocational education, special education, and vocational rehabilitation in helping handicapped youth make the transition from school to work, and how these services can be coordinated to better serve the population without duplication.

Nelson, E. (1985). Dropout prevention (ERIC Digest Number 14). Eugene: ERIC Clearinghouse on Educational Management, University of Oregon. (ERIC Document Reproduction Service No. ED 282 347)

High school dropouts are usually academic underachievers with poor social adjustment who have difficulty finding employment after leaving school. This digest discusses ways to retain at-risk students. Schools must find funds for special programs, work with agencies to guide teachers and students, and prepare dropout research. The Experimental Program for Orientation of Colorado, successful in turning around potential dropouts, is cited.

Nurss, J. R. (1987). Readiness for kindergarten (ERIC Digest). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 291 514)

This digest examines considerations in determining kindergarten readiness, including the child's age; teachers' expectations of beginning kindergarten students' social, behavioral, sensory-motor, cognitive, and language abilities; and various kindergarten programs. The inappropriateness of academically-oriented programs is pointed out, as is the fact that a child might be ready for one type of instructional program, but not another.

Ortiz, A., & Ramirez, B.A. (Eds). (1988). Schools and the culturally diverse exceptional student: Promising practices and future directions. Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children & The Council for Exceptional Children. (ERIC Document Reproduction Service No. ED 298 699)

This collection of 14 papers presented at the 1986 Ethnic and Multicultural Symposia provides state-of-the-art information on the education of culturally and linguistically diverse exceptional students. Topics covered include screening, referral, nurturance of giftedness, and bilingual education. Individual papers focus on the specific needs of Hispanic, African American, American Indian, and Asian American students.

Pallas, A. (1989). Making schools more responsive to at-risk students (Digest No. 60). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 316 617)

This digest reviews earlier approaches to improving education for disadvantaged students and presents a new three-pronged approach that includes involvement by the family, the school, and the community. It also describes social and economic factors that put youth at risk educationally, and cites impediments to the restructuring of schools to better meet the needs of at-risk students.

Passow, A. H. (1989). Curriculum and instruction in Chapter 1 programs: A look back and a look ahead (Trends and Issues No. 11). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 306 346)

This document reviews the history and current status of curricula for compensatory education programs, delivery methods, and strategies under Chapter 1 of the Education Consolidation and Improvement Act. It demonstrates that the most frequently used strategies may be the least effective ones. Of particular concern is coordination between Chapter 1 and regular classes and the failure of some parts of the program to nurture higher-level thinking skills.

Patrick. J. (1986). Critical thinking in the social studies (ERIC Digest No. 30). Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 272 432)

This digest provides teachers with information on critical thinking, explains its importance for students, and discusses ways to teach it effectively.

Peyton, J. K. (1987). Dialogue journal writing with Limited-English-Proficient (LEP) students (Q & A). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 281 366)

This document describes a dialogue journal exercise in which a student and teacher communicate regularly over a period of time. It extends teacher contact time with individual students, promotes students' language acquisition, and allows them to learn at their own pace beginning with their own level of English literacy.

Pollack, S. D., & Bempechat, J. (1989). The home and school experiences of at-risk youth: An annotated bibliography of research studies. New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 315 486)

Thirty-three major recent research studies on the school and social factors that impede disadvantaged children's ability to learn and succeed in school are included. The items in the document are divided into three sections - home, school, and society - to reflect the major influences on a child's development.

Ramon, G. (1985). Counseling Hispanic college-bound high school students. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools, & New York: ERIC Clearinghouse on Urban Education. (ERIC Document Reproduction Service No. ED 268 188)

This monograph addresses the need for improved counseling to help nurture Hispanic students' educational aspirations, prepare them for the task of getting admitted to college, and help them find financial aid. It includes a review of the research literature, an overview of the status of Hispanics in higher education, a look at characteristics of one segment of the Hispanic college-bound population (Puerto Ricans and Mexican Americans), and a discussion of key features of a systematic approach to counseling Hispanic students. Also included is a list of relevant resources.

Reyhner, J. (1989). Changes in American Indian education: A historical retrospective for educators in the United States (ERIC Digest EDO-RC-89-1). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 314 228)

This digest for all educators outlines major points in the history of American Indian education, from the arrival of Europeans through recent times. Education following the creation of the Bureau of Indian Affairs receives emphasis, however. A review of recent needs and improvement efforts is also included, and the principle of self-determination is highlighted as the key to the modern history of Indian education.

Riddlemoser, N. (1987). Working with Limited-English-Proficient students in the regular classroom (ERIC Q & A). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 289 368)

Time spent in regular English language classes is critical for LEP students. Teachers can help LEP students by communicating simply and clearly, and with warmth, and using nonverbal techniques such as prompts and gestures.

Rios, B. (1988). "Rural"--A Concept Beyond Definition? (ERIC Digest EDO-RC-88-09). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 820)

Defining the concept "rural" to the satisfaction of researchers, policymakers, and practitioners is a complex problem. Agencies and researchers need quantitative measures, but practitioners know that their part of rural America is qualitatively different from other rural areas. The lack of consensus about definitions, however, is a barrier that keeps a variety of rural needs--like those in education--from being met or even acknowledged.

Risinger, C. F. (1987). Improving writing skills through social studies (ERIC Digest No. 40). Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 285 829)

This digest discusses recent research on the link between writing and learning, and successful approaches to teaching writing and to incorporating it in a social studies curriculum. The discussion addresses ways that writing enhances critical thinking.

Rodriguez, R. (1988). Bilingual special education is appropriate for Mexican-American children with mildly handicapping conditions (ERIC Digest EDO-RC-88-04). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 293 679)

Mexican American children have made poor progress in special education programs as currently structured; moreover, they are placed in special education out of proportion to their numbers in the general population. In the face of Federal requirements that children be tested in their dominant language, assessment practices that compound the problem are still common. This digest takes the view that the development of bilingual special education programs is essential if these problems are to be solved.

Scanlan, C. L. (1986). Deterrents to participation: An adult education dilemma (Information Series No. 308). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 272 768)

This document examines the factors, both personal and situational, associated with adults' nonparticipation in organized learning, and describes approaches effective in mitigating them for specific adult populations.

Schwartz, W. (1987). Teaching science and mathematics to at-risk students (ERIC Digest No. 36). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 289 948)

This digest discusses why female and minority students traditionally have not excelled in science and math, identifies successful programs tailored to the needs of these populations, and describes effective program components.

Seligson, M., & Fink, D.B. (1988). Latchkey children and school-age child care (ERIC Digest). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 301 360)

This digest discusses research, particularly on the growing number of latchkey children, that supports school-age child care, since an important condition of children's development is the way they spend their time out of school. High-quality programs in a comfortable environment have a balanced schedule that includes child- and teacher-directed time, community service, a chance to earn money, and an understanding of an adolescent's heavy involvement in peer culture.

Sensenbaugh, P. (1989). Writing across the social studies curriculum. Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education & ERIC Clearinghouse on Reading and Communication Skills. (ERIC Document Reproduction Service No. ED 308 550)

This book of lesson plans presents writing activities for junior and senior high school social studies classes. It provides lessons on world and United States history, general topics, and newspapers; and it includes a user's guide, activities chart, resource sheets, and annotated bibliography.

Shepard, L. A. (1982). Assessment of learning disabilities. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service. (ERIC Document Reproduction Service No. ED 227 134)

The focus of this paper is on issues that influence the validity of diagnosis and assessment of learning disabilities (LD). It covers LD identification and overidentification, definitional ambiguity, locally idiosyncratic criteria, pressure from parents and regular education, students' special needs, and teaching and system failure. Technical issues related to the assessment process are also discussed, and recommendations for contextual changes to help clinicians make more rigorous diagnoses and to improve training of specialists are presented.

Shermis, M. (1989a). Strategies to help dyslexic students (Focused Access to Selected Topics [FAST] Bibliography No. 37). Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. (ERIC Document Reproduction Service No. ED 306 556)

This annotated bibliography of 35 references covers an overview of dyslexia, instructional strategies for teaching dyslexic students, and research on dyslexia.

Shermis, M. (1989b). Word processing and writing instruction for students with special needs (Focused Access to Selected Topics [FAST] Bibliography No. 11). Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills. (ERIC Document Reproduction Service No. ED 307 607)

This annotated bibliography of 26 references addresses writing instruction for students with special needs, including ESL students, through use of word processors.

Sherwood, T. (1989). Nontraditional education in rural districts (ERIC Digest EDO-RC-89-8). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 054)

Because rural communities have needs and resources that differ from those found in urban settings, nontraditional education programs give rural residents alternatives to those features of modern mass education that respond primarily to urban needs. This digest looks at a several nontraditional programs and strategies, the problems to which they respond, and the features that make them successful.

Simich-Dudgeon, C. (1986). Parent involvement and the education of Limited-English-Proficient students (ERIC Digest). Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 279 205)

The benefits of parent involvement in the education of elementary school students has been well documented. Thus, efforts should be made to encourage LEP parents to participate through programs that promote the sensitivity of school staff, strive to overcome cultural barriers, and involve the bilingual community.

Sitlington, P. L. (1986). Transition, special needs, and vocational education (Information Series No. 309). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 272 769)

Special needs youth are not being prepared for adequate employment. This document suggests ways that the various agencies serving this population can aid in the vocational education of special needs youth through skills development and provision of work experience.

Smith, J. K., Schavio, C.J ., & Edge, D. B. (1981). The evaluation of college remedial programs. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service. (ERIC Document Reproduction Service No. ED 211 607)

This monograph is a list of activities to be used by a college administrator when evaluating remedial programs that teach basic skills. Prepared for the Basic Skills Council of the New Jersey Department of Higher Education, it provides examples from experiences in New Jersey. It also includes an annotated list of 32 studies conducted in colleges around the country.

Stevens, F. I. (1984). The effects of testing on teaching and curriculum in a large urban school district. Princeton, NJ: ERIC Clearinghouse on Tests, Measurement, and Evaluation, Educational Testing Service. (ERIC Document Reproduction Service No. ED 252 581)

An urban school district provides a source of examples on the effects of testing on teaching and the curriculum, in the context of the notion of "effective schools." The report describes the method of operationalizing the effective schools research using test information, including the development of an accountability plan by the superintendents and its dissemination to all district administrators and teachers. Both new and tested strategies were used to precipitate positive change. Goals were to improve student achievement and the learning environment, and to strengthen parent and community support.

Stotsky, S. (1987). Civic writing in the classroom. Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education, Social Studies Development Center, & Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills. (ERIC Document Reproduction Service No. ED 285 800)

Literacy, and particularly civic writing, is critical for participation in the civic process. This document presents methods of teaching civic--or advocacy--writing, provides examples of it, and demonstrates how civic writing can enhance students' perceptions of themselves and help them develop skills that enable them to participate in voluntary civic or political activities.

Strasheim, L. A. (1989). Proficiency-oriented foreign language in the small high school (ERIC Digest EDO-RC-89-2). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 308 061)

A critical challenge for American education, according to reform reports of the 1980s, is improvement of instruction in foreign languages. What can small high schools, which face unique problems of staffing and scheduling, do to meet the challenge? This digest suggests solutions to help teachers and administrators in small schools handle this challenge.

Swift, D. (1988). Preparing rural students for an urban environment (ERIC Digest EDO-RC-88-08). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 296 818)

Research suggests that the migration of rural students to urban areas for work or further education will continue. Therefore, preparing students for the move from rural to urban areas is an important responsibility of rural educators. This digest considers the issues and options, including the role of values, the place of assertiveness training, modes of self-presentation, and the importance of developing a number of related skills needed for urban living.

Thiel, K. K. (1985). Reentry programs for dropouts in adult settings (Overview, ERIC Digest No. 45). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 259 215)

This digest describes the components of successful programs for young adults reentering the educational system. In general, programs offer a warm and flexible environment, a meaningful curriculum, individual counseling, and continuous constructive feedback.

Thornbrugh, C., & Fox, S. J. (1988). Bridging the challenging years: Tips for working with American Indian teenagers. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 295 773)

American Indian teenagers have high rates of suicide, early school-leaving, alcoholism, and drug usage. Even students who are doing well need to explore new experiences and to develop new skills that challenge them to reach for higher goals and help them cope with today's pressures. This guide is intended to assist counselors and teachers design preventive group counseling programs by applying the basic tenets of counseling and implementing productive activities with students.

Tindall, L. W. (1988). Retaining at-risk students: The role of career and vocational education (Information Series No. 335). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 303 683)

This paper reviews the scope of the problem of retaining at-risk secondary school students and convincing dropouts to enroll again. It identifies five major problem areas that career and vocational educators can address when serving this population.

Valdivieso, R. (1986). Must they wait another generation: Hispanics and secondary school reform (Urban Diversity Series No. 93). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 273 705)

The National Commission on Secondary Schooling for Hispanics has shown that secondary schools are not meeting these needs currently. This document discusses whether current or proposed school reforms and strategies will meet the needs of Hispanic students to lead productive and satisfying adult lives. A demographic and educational profile of the Hispanic student population is included.

Vaughn, D. L., & Vaughn, P. R. (1986). Preparing rural students for an urban work environment: A handbook for educators. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 270 243)

This handbook, organized into six sections, provides practical guidelines for working with rural youth who will be seeking jobs in urban areas. Topics include the relationship of positive rural values to urban work success, ways to help rural students develop career awareness, practical steps in getting a job, information rural students will need to know after getting a job in an urban area, and rural entrepreneurship as an alternative to relocation to urban areas. Bibliographies list studies of rural youth and career development materials for use with rural students.

Webb, M., & Bunten, P. (1988). Promotion policies in the urban high school (Digest No. 48). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 306 327)

This digest reviews promotion policies currently in effect at urban secondary schools, identifying the three general types: social promotion, tracking, and general promotion. It notes that competency-based promotion and the use of minimum competency criteria may result in an increasing number of dropouts. The alternative, grade retention, is expensive and may be racially and socioeconomically biased.

Wells, A. S. (1989a). Educating homeless children (Digest No. 52). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 308 276)

To meet the requirements of the Stewart B. McKinney Homeless Assistance Act of 1987, urban schools are developing programs to meet the special needs of homeless students, who may number up to 440,000, with half not attending school. Among the issues to be resolved are transportation from shelters to schools, assessment, lack of adequate community support services, and frequent transfers.

Wells, A. S. (1989b). Hispanic education in American: Separate and unequal (Digest No. 59). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 316 616)

Despite court decisions aimed at the integration of Hispanic students into their schools, segregation is increasing, together with the growing number of Hispanic students, according to this digest. This resegregation results in a lack of effective bilingual programs, a generally inferior education for these students, and a disproportionately large number of Hispanic dropouts.

Wells, A. S. (1989c). Middle school education--The critical link in dropout prevention (Digest No. 56). New York: ERIC Clearinghouse on Urban Education, Teachers College, Columbia University. (ERIC Document Reproduction Service No. ED 311 148)

This digest discusses improvements in the organization and curriculum of middle schools that would enhance their holding power. The size and departmentalized structure of the schools can alienate at-risk students, and grade retention is known to increase drop-out rates. Middle school teachers should receive special training in both course content and adolescent development to help them better meet the needs of their students.

White, C. S. (1988). Computers in social studies classrooms (ERIC Digest EDO-SO-88-5. Bloomington, IN: ERIC Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED 296 950)

This digest provides information about integrating computer-based tools into the curriculum. It considers drills, tutorials, simulations, and databases. It also discusses trends that will affect future computer use and the known effects of computer use.

Willer, B. (1987). Quality or affordability: Trade-offs for early childhood programs? Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED 296 809)

The increasing demand for affordable child care services is stretching the levels of program quality to the limit. Services must, however, maintain a high quality; teachers must be compensated adequately to avoid high turnover rates; and services must be available to all children. Parents need to work with states to monitor program quality and develop effective licensing criteria.

Wolford, B. I. (Comp.). (1986). Correctional education: Perspectives on programs for adult offenders (Information Series No. 310). Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document Reproduction Service No. ED 272 770)

This compilation of essays reviews some of the major concerns in correctional education, including program administration, equity and legal issues, vocational training, and postsecondary education.

Wolverton, L. (1988a). Classroom strategies for teaching migrant children about child abuse (ERIC Digest EDO-RC-88-11. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 293 681)

This digest discusses bibliotherapy as an appropriate technique for working with abused migrant children and dealing with the issue in the classroom. To use bibliotherapy successfully, teachers must identify student needs and match needs to appropriate reading materials, including the issue of how books will be used, what guidance will be given during reading, and what the follow-up activities should be. Child abuse education should also address the problem of low self-esteem, one of the primary characteristics shared by the abusive parent and the abused child.

Wolverton, L. (1988b). Teaching the abused migrant child: What's a teacher to do? (ERIC Digest EDO-RC-88-12). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 293 680)

Research conducted from 1982 to 1985 clearly identified migrant children as a population at high risk of being maltreated. This digest reviews the dynamics of maltreatment and counsels teachers about what they, as individuals, can do to prevent it. It includes guidelines for teachers' actions and a list of eight resources for teachers.

Zantal-Wiener, K. (1987). Child abuse and the handicapped child (Digest No. 446). Reston, VA: ERIC Clearinghouse on Handicapped and Gifted Children & The Council on Exceptional Children. (ERIC Document Reproduction Service No. ED 287 262)

This brief summary of research studies focuses on the link between child abuse and handicapping conditions. Although standardized data collection procedures are lacking, isolated studies suggest a disproportionate incidence of abuse among mentally retarded, behavior disordered, and physically handicapped children. Reasons include the greater dependence of these children for assistance or care, their inability to either defend themselves or report abuse, and the likelihood that they will be considered less credible than other children.

Zarate, N. (1986). Reading skills development of Hispanic students in American public schools: Some specific strategies (ERIC Digest). Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED 286 705)

Mexican American students' reading achievement declines as these students move through the educational system. By grade seven, 65 percent of Mexican American students read one or more grade levels below average. To reverse this trend of academic failure, teachers need to use instructional strategies that are known to be effective with Hispanic students. This digest considers such strategies for use at the junior and senior high levels.

SUBJECT INDEX

This index lists, under topical headings, the publications about at-risk students developed by staff and consultants of the various ERIC clearinghouses. Under these headings, each publication in the main entry section of the annotated bibliography is listed by author, publication year, and ERIC Document Reproduction Service number (ED number). This information will help you locate publications of interest in the main entry section, where publications are listed alphabetically by author and publication year. In addition, be aware that each of the publications is uniquely described by its ED number. In the main entry section ED numbers appear last in each citation, before the annotation.

Note that the "topical headings" in this index are the "major descriptors"--major topics--under which each publication was originally indexed by ERIC. The Thesaurus of ERIC Descriptors is, therefore, the best guide to these topics. The Thesaurus provides definitions of each topic, history of use of each topic in the ERIC database, and other aids. Most academic libraries include copies of the Thesaurus in their reference departments.

ACADEMIC ACHIEVEMENT
Ascher, 1988e, ED 298 213
Edington & Koehler, 1987, ED 289 658
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234
Howley, 1989c, ED 308 062
Kidwell, 1986, ED 286 703
Pollack & Bempechat, 1989, ED 315 486
Schwartz, 1987, ED 289 948
Zarate, 1986, ED 286 705

ACADEMIC FAILURE
Ascher, 1988a, ED 304 498
Beekman, 1987, ED 291 015

ACADEMIC PERSISTENCE
Donnelly, 1987, ED 292 172
Kerka, 1989, ED 308 401
Naylor, 1989a, ED 308 400

ACADEMICALLY GIFTED
Luhman & Fundis, 1989, ED 308 060

ACCESS TO EDUCATION
ERIC Clearinghouse on Adult, Career, and Vocational Eduction, 1988a, ED 307 381
Kerka, 1986, ED 275 889
Luhman & Fundis, 1989, ED 308 060
Ramon, 1985, ED 268 188
Scanlan, 1986, ED 272 768

ACCULTURATION
Riddlemoser, 1987, ED 289 368

ADJUSTMENT TO ENVIRONMENT
Swift, 1988, ED 296 818
Thornbrugh & Fox, 1988, ED 295 773
Vaughn & Vaughn, 1986, ED 270 243

ADOLESCENTS
Ascher, 1985a, ED 269 517
Ascher, 1988d, ED 306 326
Bempechat, Stauber & Way, 1989, ED 316 615
Burge, 1987, ED 290 934
Flaxman, Ascher, & Harrington, 1988, ED 308 257
Lachance, 1984, ED 260 364
Lachance, 1988, ED 304 628
Thornbrugh & Fox, 1988, ED 295 773

ADULT BASIC EDUCATION
Kerka, 1988a, ED 299 455

ADULT EDUCATION
Kerka, 1986, ED 275 889
Scanlan, 1986, ED 272 768
Thiel, 1985, ED 259 215

ADULT PROGRAMS
Thiel, 1985, ED 259 215

ADULT STUDENTS
ERIC Clearinghouse on Languages and Linguistics, 1983, ED 227 694
Kerka, 1988a, ED 299 455
Kerka, 1989, ED 308 401

AGRICULTURAL PRODUCTION
Howley, 1989b, ED 308 058

AMERICAN INDIAN EDUCATION
Boloz, Hickman, & Loughrin, 1987, ED 281 698
Brescia & Fortune, 1988, ED 296 813
Cajete, 1988, ED 296 812
George, 1987, ED 284 715
Reyhner, 1989, ED 314 228
Thornbrugh & Fox, 1988, ED 295 773

AMERICAN INDIANS
Florey & Tafoya, 1988, ED 296 810
Kidwell, 1986, ED 286 703
Marinez & Ortiz de Montellano, 1988, ED 296 819

ARTICULATION EDUCATION
Ascher & Schwartz, 1989, ED 308 277

ATTACHMENT BEHAVIOR
Griffin & Fein, 1988, ED 301 362

BASIC SKILLS
Smith, Schavio, & Edge, 1981, ED 211 607

BELIEFS
Bempechat & Wells, 1989, ED 315 484

BIBLIOTHERAPY
Wolverton, 1988a, ED 293 681

BILINGUAL EDUCATION
Escamilla, 1989, ED 308 055
Harrison, 1986, ED 268 302
Rodriguez, 1988, ED 293 679
Wells, 1989b, ED 316 616

BUDGETING
Swift, 1988, ED 296 818

CAREER COUNSELING
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988b, ED 307 380

CAREER DEVELOPMENT
Burge, 1987, ED 290 934
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988b, ED 307 380
Kerka, 1988b, ED 296 123

CAREER EDUCATION
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988b, ED 307 380
Kerka, 1988b, ED 296 123
Naylor, 1987, ED 282 094

CAREER EXPLORATION
Kerka, 1987, ED 282 093

CHANGE STRATEGIES
Howley, 1989a, ED 308 059

CHILD ABUSE
Wolverton, 1988b, ED 293 680
Wolverton, 1988a, ED 293 681
Zantal, 1987, ED 287 262

CHILD ADVOCACY
Zantal, 1987, ED 287 262

CHILD CAREGIVERS
Willer, 1987, ED 296 809

CHILD DEVELOPMENT
Katz, 1987, ED 290 554

CHILDREN
Asher, Williams, Burton, & Oden, 1987, ED 283 625
Wells, 1989a, ED 308 276

CITIZEN PARTICIPATION
Stotsky, 1987, ED 285 800

CITIZENSHIP EDUCATION
Kirby, 1989, ED 309 135
Miller, 1988, ED 296 947
Stotsky, 1987, ED 285 800

CITIZENSHIP
Miller, 1988, ED 296 947

CIVICS
Stotsky, 1987, ED 285 800

CIVIL RIGHTS LEGISLATION
Wells, 1989b, ED 316 616

CLASS ACTIVITIES
Jacob & Mattson, 1987, ED 287 314

CLASSROOM COMMUNICATION
Peyton, 1987, ED 281 366
Riddlemoser, 1987, ED 289 368

CLASSROOM ENVIRONMENT
Bempechat & Wells, 1989, ED 315 484

CLASSROOM TECHNIQUES
Honig, Wittmer & Gilbralter, 1987, ED 287 592
Hudelson, 1988, ED 303 046
Wolverton, 1988a, ED 293 681

COGNITIVE PROCESSES
Barnitz, 1985, ED 256 182
Schwartz, 1987, ED 289 948

COLLEGE BOUND STUDENTS
Ramon, 1985, ED 268 188

COLLEGE ENVIRONMENT
Kerka, 1989, ED 308 401

COLLEGE PREPARATION
Kidwell, 1986, ED 286 703

COLLEGE ROLE
Ascher & Schwartz, 1989, ED 308 277

COLLEGE SCHOOL COOPERATION
Ascher & Schwartz, 1989, ED 308 277

COMMUNICATION THOUGHT TRANSFER
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234

COMMUNITY ACTION
Kirby, 1989, ED 309 135

COMMUNITY SERVICES
Kirby, 1989, ED 309 135

BEST COPY AVAILABLE

COMPENSATORY EDUCATION
Ascher & Flaxman, 1988, ED 306 338
Ascher, 1987a, ED 289 947
Ascher, 1988b, ED 292 940
Passow, 1989, ED 306 346

COMPETENCY BASED EDUCATION
Webb & Bunten, 1988, ED 306 327

COMPLIANCE PSYCHOLOGY
Honig, Wittmer, & Gilbralter, 1987, ED 287 592

COMPUTER-ASSISTED INSTRUCTION
White, 1988, ED 296 950

COMPUTER-ASSISTED TESTING
Kress, 1988, ED 297 303

COMPUTER USES IN EDUCATION
Kleifgen, 1989, ED 311 120

CONCEPT TEACHING
Mestre, 1989, ED 313 192

CONTENT AREA WRITING
Risinger, 1987, ED 285 829

COOPERATION
Honig, Wittmer, & Gilbralter, 1987, ED 287 592

COOPERATIVE LEARNING
Lyman & Foyle, 1988, ED 306 003

COOPERATIVE PROGRAMS
Luhman & Fundis, 1989, ED 308 060

CORRECTIONAL EDUCATION
Imel, 1986, ED 275 888
Wolford, 1986, ED 272 770

CORRECTIONAL INSTITUTIONS
Wolford, 1986, ED 272 770

CORRECTIONAL REHABILITATION
Wolford & Others, 1986, ED 272 770

COUNSELING TECHNIQUES
Bleuer, 1988, ED 304 631
Herbert, 1983, ED 287 139
Lachance, 1984, ED 260 364
Thornbrugh & Fox, 1988, ED 295 773

COUNSELOR ROLE
Bleuer & Schreiber, 1989, ED 307 524
Bleuer, 1987, ED 286 112
Bleuer, 1988, ED 304 631

COURSE CONTENT
Freeman & Freeman, 1988, ED 301 070

CRITICAL THINKING
Patrick, 1986, ED 272 432

CROSS CULTURAL TRAINING
Lopez-Valdez, 1985, ED 260 304

CULTURAL DIFFERENCES
Cohen, 1986, ED 273 539
Hornick, 1986, ED 275 792
Ortiz & Ramirez, 1988, ED 298 699

CULTURAL INFLUENCES
George, 1987, ED 284 715

CULTURE FAIR TESTS
Brescia & Fortune, 1988, ED 296 813
Florey & Tafoya, 1988, ED 296 810

CURRICULUM DESIGN
Miller, 1988, ED 296 947
Passow, 1989, ED 306 346

CURRICULUM DEVELOPMENT
Ascher, 1988a, ED 304 498
Blum & Spangehl, 1982, ED 223 762

CURRICULUM PROBLEMS
Reyhner, 1989, ED 314 228
Wells, 1989c, ED 311 148

DAILY LIVING SKILLS
Kerka, 1987, ED 282 093

DAY CARE CENTERS
Willer, 1987, ED 296 809

DAY CARE
Griffin & Fein, 1988, ED 301 362
Willer, 1987, ED 296 809

DEFINITIONS
Ascher & Schwartz, 1987, ED 285 961
Pallas, 1989, ED 316 617
Rios, 1988, ED 296 820

DELINQUENT REHABILITATION
Wolford, 1986, ED 272 770

DELIVERY SYSTEMS
Ascher & Flaxman, 1988, ED 306 338
Ascher, 1988b, ED 292 940
Jordan, 1988, ED 302 964

DEMONSTRATION PROGRAMS
Jordan, 1988, ED 302 964
Mattera, 1987, ED 294 704

DIALOGS LANGUAGE
Peyton, 1987, ED 281 366

DISABILITIES
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988a, ED 307 381
Imel, 1986, ED 275 888
Interstate Migrant Education Council, 1988, ED 294 703
Jordan, 1988, ED 302 964
Kerka, 1987, ED 282 093
Naylor, 1985, ED 259 217
Ortiz & Ramirez, 1988, ED 298 699
Sitlington, 1986, ED 272 769
Zantal, 1987, ED 287 262

DISADVANTAGED
Donnelly, 1987, ED 292 172
ERIC/ACVE, 1988a, ED 307 381

DISADVANTAGED YOUTH
Ascher & Schwartz, 1989, ED 308 277
Ascher, 1987a, ED 289 947
Ascher, 1988d, ED 306 326
Flaxman, Ascher, & Harrington, ED 308 257

DISCIPLINE
Honig, Wittmer, & Gilbralter, 1987, ED 287 592

DISLOCATED WORKERS
Naylor, 1989b, ED 305 493

DISPLACED HOMEMAKERS
Burge, 1987, ED 290 934

DISTANCE EDUCATION
Barker, 1987, ED 286 698

DRINKING
Lachance, 1988, ED 304 628

DROPOUT ATTITUDES
Beekman, 1987, ED 291 015

DROPOUT CHARACTERISTICS
Ascher & Schwartz, 1987, ED 285 961
Bempechat, Stauber, & Way, 1989, ED 316 615
Thiel, 1985, ED 259 215

DROPOUT PREVENTION
Bempechat & Wells, 1989, ED 315 484
ERIC Clearinghouse on Educational Management, 1986c, ED 268 666
ERIC Clearinghouse on Educational Management, 1986b, ED 275 053
Kerka, 1988a, ED 299 455
Naylor, 1987, ED 282 094
Naylor, 1989a, ED 308 400
Nelson, 1985, ED 282 347
Tindall, 1988, ED 303 683
Wells, 1989c, ED 311 148

DROPOUT PROGRAMS
ERIC Clearinghouse on Educational Management, 1986c, ED 268 666
ERIC Clearinghouse on Educational Management, 1986b, ED 275 053
Naylor, 1989a, ED 308 400
Thiel, 1985, ED 259 215

DROPOUT RATE
Ascher & Schwartz, 1987, ED 285 961

DROPOUT RESEARCH
ERIC Clearinghouse on Educational Management, 1986b, ED 275 053
Naylor, 1987, ED 282 094
Nelson, 1985, ED 282 347

DROPOUTS
Beekman, 1987, ED 291 015
ERIC Clearinghouse on Educational Management, 1986c, ED 268 666
ERIC Clearinghouse on Urban Education, 1988, ED 306 337
Naylor, 1989a, ED 308 400
Nelson, 1985, ED 282 347

DRUG ABUSE
Klauke, 1988, ED 301 968
Lachance, 1984, ED 260 364

DRUG ADDICTION
Lachance, 1984, ED 260 364

DRUG EDUCATION
Klauke, 1988, ED 301 968

DRUG USE
Lachance, 1988, ED 304 628

DYSLEXIA
Shermis, 1989a, ED 306 556

EARLY CHILDHOOD EDUCATION
Katz, 1987, ED 290 554
Lyman & Foyle, 1988, ED 306 003
Nurss, 1987, ED 291 514

EARLY PARENTHOOD
Ascher, 1985b, ED 267 150
Ascher, 1985a, ED 269 517
Bempechat, Stauber, & Way, 1989, ED 316 615

ECONOMICALLY DISADVANTAGED
Ascher, 1988e, ED 298 213

ECONOMICS EDUCATION
Miller, 1988, ED 296 947

ECONOMICS
Miller, 1988, ED 296 947

EDUCATION WORK RELATIONSHIP
Kerka, 1987, ED 282 093
Sitlington, 1986, ED 272 769

EDUCATIONAL ATTITUDES
Scanlan, 1986, ED 272 768

EDUCATIONAL BENEFITS
Ascher, 1985a, ED 269 517

EDUCATIONAL CHANGE
Pallas, 1989, ED 316 617
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988c, ED 296 171
Valdivieso, 1986, ED 273 705

EDUCATIONAL COOPERATION
Naylor, 1985, ED 259 217

EDUCATIONAL COUNSELING
Ramon, 1985, ED 268 188

EDUCATIONAL DIAGNOSIS
Shepard, 1982, ED 227 134

EDUCATIONAL ENVIRONMENT
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234

EDUCATIONAL EQUITY FINANCE
Howley, 1989a, ED 308 059

EDUCATIONAL EXPERIENCE
Pollack & Bempechat, 1989, ED 315 486

EDUCATIONAL HISTORY
Escamilla, 1989, ED 308 055
Reyhner, 1989, ED 314 228

EDUCATIONAL IMPROVEMENT
Reyhner, 1989, ED 314 228

EDUCATIONAL NEEDS
Blum & Spangehl, 1982, ED 223 762
Interstate Migrant Education Council, 1988, ED 294 703
Kerka, 1988b, ED 296 123
Wells, 1989a, ED 308 276

EDUCATIONAL OBJECTIVES
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988c, ED 296 171
Katz, Raths, & Torres, 1987, ED 280 595

EDUCATIONAL POLICY
Katz, Raths, & Torres, 1987, ED 280 595
Webb & Bunten, 1988, ED 306 327

EDUCATIONAL PRACTICES
Thiel, 1985, ED 259 215
Ortiz & Ramirez, 1988, ED 298 699

EDUCATIONAL QUALITY
Griffin & Fein, 1988, ED 301 362
Willer, 1987, ED 296 809

EDUCATIONAL STRATEGIES
Ascher, 1988b, ED 292 940
Kerka, 1988a, ED 299 455

EDUCATIONAL TESTING
Stevens, 1984, ED 252 581

EDUCATIONAL TRENDS
Ascher, 1987b, ED 287 972
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988c, ED 296 171
Pallas, 1989, ED 316 617

EDUCATIONALLY DISADVANTAGED
Ascher & Flaxman, 1988, ED 306 338
Bempechat & Ginsburg, 1989, ED 315 485
Kerka, 1988a, ED 299 455
Passow, 1989, ED 306 346

ELEMENTARY EDUCATION
Bleuer & Schreiber, 1989, ED 307 524

ELEMENTARY SCHOOL CURRICULUM
Katz, 1987, ED 290 554

ELEMENTARY SCHOOL STUDENTS
Ascher & Flaxman, 1988, ED 306 338
Seligson & Fink, 1988, ED 301 360

EMERGENCY PROGRAMS
Wells, 1989a, ED 308 276

EMPLOYMENT OPPORTUNITIES
ERIC Clearinghouse on Urban Education, 1988, ED 306 337

EMPLOYMENT POTENTIAL
Sitlington, 1986, ED 272 769

EMPLOYMENT PROGRAMS
Naylor, 1989b, ED 305 493

EMPLOYMENT SERVICES
Lopez, 1985, ED 260 304

ENGLISH FOR SPECIAL PURPOSES
Crandall, 1987, ED 283 387

ENGLISH SECOND LANGUAGE
Barnitz, 1985, ED 256 182
Crandall, 1987, ED 283 387
ERIC Clearinghouse on Adult, Career, and Vocational Education, 1988b, ED 307 380
ERIC Clearinghouse on Languages and Linguistics, 1983, ED 227 694
Freeman & Freeman, 1988, ED 301 070
Hudelson, 1988, ED 303 046
Peyton, 1987, ED 281 366
Shermis, 1989b, ED 307 607

ENROLLMENT TRENDS
Imel, 1989, ED 304 564

EQUAL EDUCATION
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988a, ED 307 381
Imel, 1986, ED 275 888

ERROR PATTERNS
Mestre, 1989, ED 313 192

ETHNIC BIAS
Cohen, 1986, ED 273 539

ETHNIC GROUPS
Ascher, 1988a, ED 304 498

ETHNIC STUDIES
Cohen, 1986, ED 273 539

EVALUATION METHODS
Smith, Schavio & Edge, 1981, ED 211 607

EXPECTATIONS
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234

EXTENDED SCHOOL YEAR
Ascher, 1988e, ED 298 213

FAMILY INFLUENCE
Pollack & Bempechat, 1989, ED 315 486

FAMILY LIFE
Honig, Wittmer, & Gilbraiter, 1987, ED 287 592

FATHERLESS FAMILY
Burge, 1987, ED 290 934
FEDERAL PROGRAMS
Ascher, 1987a, ED 289 947

GEOGRAPHIC CONCEPTS
Backler & Stoltman, 1986, ED 277 601

GEOGRAPHY INSTRUCTION
Backler & Stoltman, 1986, ED 277 601

GEOGRAPHY
Sensenbaugh, 1989, ED 308 550

GIFTED
Florey & Tafoya, 1988, ED 296 810
George, 1987, ED 284 715

GRADE REPETITION
Ascher, 1988a, ED 304 498

GRADUATION REQUIREMENTS
Webb & Bunten, 1988, ED 306 327

GROUP DYNAMICS
Jacob & Mattson, 1987, ED 287 314

GROUPING INSTRUCTIONAL PURPOSES
Jacob & Mattson, 1987, ED 287 314

HELPING RELATIONSHIP
Wolverton, 1988b, ED 293 680

HIGH RISK PERSONS
Ascher & Schwartz, 1987, ED 285 961
ERIC Clearinghouse on Urban Education, 1988, ED 306 337
Flaxman, Ascher, & Harrington, 1988, ED 308 257

HIGH RISK STUDENTS
Ascher, 1987a, ED 289 947
Barron & Others, 1989, ED 316 214
Bempechat & Ginsburg, 1989, ED 315 485
Bempechat, Stauber, & Way, 1989, ED 316 615
Bempechat & Wells, 1989, ED 315 484
Bleuer & Schreiber, 1989, ED 307 524
Blum & Spangehl, 1982, ED 223 762
Donnelly, 1987, ED 292 172
ERIC Clearinghouse on Educational Management, 1986b, ED 275 053
Kleifgen, 1989, ED 311 120
Naylor, 1989a, ED 308 400
Pallas, 1989, ED 316 617
Pollack & Bempechat, 1989, ED 315 486
Schwartz, 1987, ED 289 948
Tindall, 1988, ED 303 683
Wells, 1989c, ED 311 148

HIGH SCHOOLS
Webb & Bunten, 1988, ED 306 327

HISPANIC AMERICANS
Ramon, 1985, ED 268 188
ERIC Clearinghouse on Urban Education, 1988, ED 306 337
Mestre, 1989, ED 313 192
Valdivieso, 1986, ED 273 705
Zarate, 1986, ED 286 705

HOMELESS PEOPLE
Wells, 1989a, ED 308 276

HUMAN GEOGRAPHY
Backler & Stoltman, 1986, ED 277 601

IMMIGRANTS
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988b, ED 307 380
Harrison, 1986, ED 268 302
Lopez-Valdez, 1985, ED 260 304

INCIDENCE
Zantal, 1987, ED 287 262

INDIVIDUAL CHARACTERISTICS
Seligson & Fink, 1988, ED 301 360

INDIVIDUAL NEEDS
George, 1987, ED 284 715
Kerka, 1986, ED 275 889

INFANTS
Griffin & Fein, 1988, ED 301 362

INFORMAL READING INVENTORIES
Kress, 1988, ED 297 303

INFORMATION SOURCES
Barker, 1987, ED 286 698

INSTRUCTIONAL DEVELOPMENT
Rodriguez, 1988, ED 293 679

INSTRUCTIONAL EFFECTIVENESS
Barron & Others, 1989, ED 316 214

INSTRUCTIONAL IMPROVEMENT
Stevens, 1984, ED 252 581

INSTRUCTIONAL INNOVATION
Schwartz, 1987, ED 289 948

INSTRUCTIONAL LEADERSHIP
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234

INTERCULTURAL COMMUNICATION
Harrison, 1986, ED 268 302

INTERDISCIPLINARY APPROACH
Jordan, 1988, ED 302 964

INTERMODE DIFFERENCES
Barron & Others, 1989, ED 316 214

INTERPERSONAL COMMUNICATION
Peyton, 1987, ED 281 366

INTERPERSONAL COMPETENCE
Asher, Williams, Burton, & Oden, 1987, ED 283 625

JOB SEARCH METHODS
Kerka, 1987, ED 282 093
Swift, 1988, ED 296 818
Vaughn & Vaughn, 1986, ED 270 243

JOB SKILLS
Sitlington, 1986, ED 272 769

JOB TRAINING
ERIC Clearinghouse on Urban Education, 1988, ED 306 337
Lopez-Valdez, 1985, ED 260 304

KINDERGARTEN
Egertson, 1987, ED 293 630
Katz, Raths, & Torres, 1987, ED 280 595
Nurss, 1987, ED 291 514

KINDERGARTEN CHILDREN
Nurss, 1987, ED 291 514

LANGUAGE ARTS
Boloz, Hickman, & Longhrin, 1987, ED 281 698

LANGUAGE ATTITUDES
Christian, 1987, ED 289 364

LANGUAGE EXPERIENCE APPROACH
Boloz, Hickman & Longhrin, 1987, ED 281 698

LANGUAGE OF INSTRUCTION
Freeman & Freeman, 1988, ED 301 070

LANGUAGE PROFICIENCY
Strasheim, 1989, ED 308 061

LANGUAGE SKILLS
Kleifgen, 1989, ED 311 120

LATCHKEY CHILDREN
Seligson & Fink, 1988, ED 301 360

LEARNING ACTIVITIES
Boloz, Hickman, & Longhrin, 1987, ED 281 698
Wolverton, 1988a, ED 293 681

LEARNING DISABILITIES
Shepard, 1982, ED 227 134
Shermis, 1989b, ED 307 607

LEARNING PROBLEMS
Shepard, 1982, ED 227 134

LEARNING READINESS
Katz, Raths & Torres, 1987, ED 280 595

LEARNING STRATEGIES
Cajete, 1988, ED 296 812

LEGAL RESPONSIBILITY
Imel, 1986, ED 275 888

LESSON PLANS
Sensenbaugh, 1989, ED 308 550

LIMITED ENGLISH SPEAKING
Crandall, 1987, ED 283 387
Dale, 1986, ED 279 206
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988a, ED 307 381
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988b, ED 307 380
Freeman & Freeman, 1988, ED 301 070
Jacob & Mattson, 1987, ED 287 314
Lopez-Valdez, 1985, ED 260 304
Peyton, 1987, ED 281 366
Riddlemoser, 1987, ED 289 368
Simich, 1986, ED 279 205

LITERACY
Barnitz, 1985, ED 256 182

LITERACY EDUCATION
Kleifgen, 1989, ED 311 120

LITERATURE REVIEWS
ERIC Clearinghouse on Educational Management, 1986c, ED 268 666

LOWER CLASS PARENTS
Ascher, 1988c, ED 293 973

MAINSTREAMING
Riddlemoser, 1987, ED 289 368
Shepard, 1982, ED 227 134

MANUFACTURING INDUSTRY
Howley, 1989b, ED 308 058

MARKETING
Kerka, 1986, ED 275 889

MATHEMATICAL CONCEPTS
Mestre, 1989, ED 313 192

MATHEMATICS INSTRUCTION
Cajete, 1988, ED 296 812
Crandall, 1987, ED 283 387
Mestre, 1989, ED 313 192
Schwartz, 1987, ED 289 948

MENTORS
Ascher, 1988d, ED 306 326
Flaxman, Ascher, & Harrington, 1988, ED 308 257

MEXICAN AMERICAN EDUCATION
Escamilla, 1989, ED 308 055

MEXICAN AMERICANS
Marinez & Ortiz de Montellano, 1988, ED 296 819
Rodriguez, 1988, ED 293 679
Zarate, 1986, ED 286 705

MIDDLE SCHOOLS
Bempechat & Wells, 1989, ED 315 484
Wells, 1989c, ED 311 148

MIGRANT ADULT EDUCATION
Johnson, Lovel, Morales, Morse, & Prokop, 1986, ED 270 242

MIGRANT CHILDREN
Lunon, 1986, ED 286 700
Wolverton, 1988b, ED 293 680

MIGRANT EDUCATION
Interstate Migrant Education Council, 1988, ED 294 703
Lunon, 1986, ED 286 700
Mattera, 1987, ED 294 704
Wolverton, 1988a, ED 293 681

MIGRANT PROGRAMS
Johnson & Others, 1986, ED 270 242
Mattera, 1987, ED 294 704

MIGRANT YOUTH
Johnson & Others, 1986, ED 270 242

MILD DISABILITIES
Rodriguez, 1988, ED 293 679

MINING
Howley, 1989b, ED 308 058

MINORITY GROUPS
Ascher, 1987b, ED 287 972
Ascher, 1988c, ED 293 973
Ortiz & Ramirez, 1988, ED 298 699

MISCONCEPTIONS
Mestre, 1989, ED 313 192

MODELS
Blum & Spangehl, 1982, ED 223 762

MOTHERLESS FAMILY
Burge, 1987, ED 290 934

MOTIVATION
Beekman, 1987, ED 291 015

MOTIVATION TECHNIQUES
Kidwell, 1986, ED 286 703

MULTICULTURAL EDUCATION
Ortiz & Ramirez, 1988, ED 298 699

NONSTANDARD DIALECTS
Christian, 1987, ED 289 364
Hornick, 1986, ED 275 792

NONTRADITIONAL EDUCATION
Sherwood, 1989, ED 308 054

NONTRADITIONAL OCCUPATIONS
Imel, 1989, ED 304 564

OCCUPATIONAL HOME ECONOMICS
Imel, 1989, ED 304 564

OFFICE OCCUPATIONS EDUCATION
Imel, 1989, ED 304 564

ONE PARENT FAMILY
Burge, 1987, ED 290 934
Kerka, 1988b, ED 296 123

ONLINE SYSTEMS
Lunon, 1986, ED 286 700

OUTCOMES OF EDUCATION
Edington & Koehler, 1987, ED 289 658
Griffin & Fein, 1988, ED 301 362
Lyman & Foyle, 1988, ED 306 003
Pollack & Bempechat, 1989, ED 315 486
Wells, 1989b, ED 316 616

OUTPLACEMENT SERVICES EMPLOYMENT
Naylor, 1989b, ED 305 493

PARENT EDUCATION
Asher, Williams, Burton, & Oden, 1987, ED 283 625

PARENT PARTICIPATION
Ascher, 1988c, ED 293 973
Simich, 1986, ED 279 205

PARENT ROLE
Kerka, 1987, ED 282 093
Rodriguez, 1988, ED 293 679
Simich, 1986, ED 279 205

PARENT SCHOOL RELATIONSHIP
Simich, 1986, ED 279 205

PARENT TEACHER COOPERATION
Ascher, 1988c, ED 293 973

PARTICIPANT CHARACTERISTICS
Kerka, 1986, ED 275 889
Scanlan, 1986, ED 272 768

PARTICIPATION
Kerka, 1986, ED 275 889
Scanlan, 1986, ED 272 768

PEER RELATIONSHIP
Asher, Williams, Burton, & Oden, 1987, ED 283 625

PERSISTENCE
Flaxman, Ascher, & Harrington, 1988, ED 308 257

PHYSICAL GEOGRAPHY
Backler & Stoltman, 1986, ED 277 601

POTENTIAL DROPOUTS
Tindall, 1988, ED 303 683

PREDICTOR VARIABLES
Bempechat, Stauber, & Way, 1989, ED 316 615
Pallas, 1989, ED 316 617

PREGNANCY
Ascher, 1985a, ED 269 517

PREGNANT STUDENTS
Ascher, 1985b, ED 267 150

PRESCHOOL CURRICULUM
Egertson, 1987, ED 293 630
Katz, 1987, ED 290 554

PRESCHOOL EDUCATION
Jordan, 1988, ED 302 964

PRESCHOOL TEACHERS
Nurss, 1987, ED 291 514

PREVENTION
Klauke, 1988, ED 301 968
Lachance, 1984, ED 260 364
Lachance, 1988, ED 304 628
Thornbrugh & Fox, 1988, ED 295 773

PRINCIPALS
ERIC Clearinghouse on Educational Management, 1986a, ED 290 234

PRISONERS
Wolford, 1986, ED 272 770

PROCESS EDUCATION
Kleifgen, 1989, ED 311 120

PROGRAM ADMINISTRATION
Imel, 1986, ED 275 888

PROGRAM COSTS
Barker, 1987, ED 286 698

PROGRAM DESCRIPTIONS
Mattera, 1987, ED 294 704

PROGRAM DESIGN
Ascher & Schwartz, 1989, ED 308 277

PROGRAM DEVELOPMENT
Bl[illegible] & Spangehl, 1982, ED 223 762
Luhman & Fundis, 1989, ED 308 060
Naylor, 1989b, ED 305 493
Simich, 1986, ED 279 205

PROGRAM EFFECTIVENESS
Ascher, 1988b, ED 292 940
Donnelly, 1987, ED 292 172
Naylor, 1987, ED 282 094
Simich, 1986, ED 279 205
Smith, Schavio, & Edge, 1981, ED 211 607

PROGRAM EVALUATION
Ascher, 1988b, ED 292 940
Smith, Schavio, & Edge, 1981, ED 211 607

PROGRAM IMPROVEMENT
Johnson, Lovel, Morales, Morse, & Prokop, 1986, ED 270 242
Naylor, 1987, ED 282 094

PSYCHOEDUCATIONAL METHODS
Shepard, 1982, ED 227 134

PUBLIC SERVICE
Kirby, 1989, ED 309 135

PUPIL PERSONNEL SERVICES
Dale, 1986, ED 279 206

RACIAL SEGREGATION
Wells, 1989b, ED 316 616

READING ACHIEVEMENT
Zarate, 1986, ED 286 705

READING DIAGNOSIS
Kress, 1988, ED 297 303

READING DIFFICULTIES
Shermis, 1989a, ED 306 556

READING INSTRUCTION
Barnitz, 1985, ED 256 182

READING RESEARCH
Barnitz, 1985, ED 256 182
Shermis, 1989a, ED 306 556

READING STRATEGIES
Zarate, 1986, ED 286 705

RECORDKEEPING
Lunon, 1986, ED 286 700

REENTRY STUDENTS
Thiel, 1985, ED 259 215

RELAXATION TRAINING
Herbert, 1983, ED 287 139

RELEVANCE EDUCATION
Cajete, 1988, ED 296 812
George, 1987, ED 284 715
Marinez & Ortiz de Montellano, 1988, ED 296 819

REMEDIAL PROGRAMS
Smith, Schavio & Edge, 1981, ED 211 607

REMEDIAL READING
Kress, 1988, ED 297 303

ROLE MODELS
Flaxman, Ascher, & Harrington, 1988, ED 308 257

RURAL AREAS
Howley, 1989a, ED 308 059
Howley, 1989b, ED 308 058
Rios, 1988, ED 296 820

RURAL EDUCATION
Edington & Koehler, 1987, ED 289 658
Howley, 1989a, ED 308 059
Howley, 1989b, ED 308 058
Luhman & Fundis, 1989, ED 308 060
Rios, 1988, ED 296 820
Sherwood, 1989, ED 308 054

RURAL SCHOOLS
Barker, 1987, ED 286 698
Luhman & Fundis, 1989, ED 308 060
Rios, 1988, ED 296 820

RURAL TO URBAN MIGRATION
Swift, 1988, ED 296 818
Vaughn & Vaughn, 1986, ED 270 243

RURAL URBAN DIFFERENCES
Edington & Koehler, 1987, ED 289 658

RURAL YOUTH
Swift, 1988, ED 296 818
Vaughn & Vaughn, 1986, ED 270 243

SCHOOL ACTIVITIES
Herbert, 1983, ED 287 139

SCHOOL AGE DAY CARE
Seligson & Fink, 1988, ED 301 360

SCHOOL COUNSELING
Bleuer & Schreiber, 1989, ED 307 524
Bleuer, 1987, ED 286 112
Herbert, 1983, ED 287 139

SCHOOL COUNSELORS
Bleuer, 1988, ED 304 631

SCHOOL DEMOGRAPHY
Bempechat & Ginsburg, 1989, ED 315 485
Wells, 1989b, ED 316 616

SCHOOL DESEGREGATION
Wells, 1989b, ED 316 616

SCHOOL DISTRICT SIZE
Howley, 1989c, ED 308 062

SCHOOL EFFECTIVENESS
Bempechat & Ginsburg, 1989, ED 315 485
ERIC Clearinghouse on Educational Management, 1986c, ED 268 666
Howley, 1989c, ED 308 062

SCHOOL ENTRANCE AGE
Hills, 1987, ED 281 607
Katz & Others, 1987, ED 280 595

SCHOOL GUIDANCE
Ramon, 1985, ED 268 188

SCHOOL HOLDING POWER
Ascher & Schwartz, 1987, ED 285 961
Donnelly, 1987, ED 292 172
Kerka, 1988a, ED 299 455
Kerka, 1989, ED 308 401
Naylor, 1989a, ED 308 400
Nelson, 1985, ED 282 347
Tindall, 1988, ED 303 683

SCHOOL ORGANIZATION
Wells, 1989c, ED 311 148

SCHOOL ORIENTATION
Dale, 1986, ED 279 206

SCHOOL READINESS
Nurss, 1987, ED 291 514

SCHOOL READINESS TESTS
Hills, 1987, ED 281 607

SCHOOL ROLE
Ascher & Schwartz, 1989, ED 308 277
Dale, 1986, ED 279 206
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988c, ED 296 171
Lachance, 1988, ED 304 628
Naylor, 1985, ED 259 217
Naylor, 1989b, ED 305 493

SCHOOL SIZE
Howley, 1989c, ED 308 062

SCIENCE CAREERS
Marinez & Ortiz de Montellano, 1988, ED 296 819

SCIENCE CURRICULUM
Marinez & Ortiz de Montellano, 1988, ED 296 819

SCIENCE INSTRUCTION
Cajete, 1988, ED 296 812
Crandall, 1987, ED 283 387
Marinez & Ortiz de Montellano, 1988, ED 296 819
Schwartz, 1987, ED 289 948

SCREENING TESTS
Hills, 1987, ED 281 607

SECOND LANGUAGE INSTRUCTION
Freeman & Freeman, 1988, ED 301 070
Harrison, 1986, ED 268 302
Strasheim, 1989, ED 308 061

SECOND LANGUAGE PROGRAMS
Strasheim, 1989, ED 308 061

SECOND LANGUAGES
Barnitz, 1985, ED 256 182

SECONDARY SCHOOL CURRICULUM
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988c, ED 296 171

SECONDARY SCHOOL STUDENTS
Johnson, Lovel, Morales, Morse, & Prokop, 1986, ED 270 242

SECONDARY SCHOOLS
Valdivieso, 1986, ED 273 705

SELF-ACTUALIZATION
Blum & Spangehl, 1982, ED 223 762

SELF-DISCLOSURE INDIVIDUALS
Wolverton, 1988b, ED 293 680

SERVICES
Ascher, 1988b, ED 292 940

SEX FAIRNESS
Imel, 1989, ED 304 564

SKILL DEVELOPMENT
Zarate, 1986, ED 286 705

SMALL GROUP INSTRUCTION
Jacob & Mattson, 1987, ED 287 314

SMALL SCHOOLS
Barker, 1987, ED 286 698
Edington & Koehler, 1987, ED 289 658
Howley, 1989c, ED 308 062
Strasheim, 1989, ED 308 061

SOCIAL DEVELOPMENT
Asher, Williams, Burton, & Oden, 1987, ED 283 625

SOCIAL SERVICES
Ascher, 1985b, ED 267 150

SOCIAL STUDIES
Cohen, 1986, ED 273 539
Crandall, 1987, ED 283 387
Patrick, 1986, ED 272 432
Risinger, 1987, ED 285 829
Sensenbaugh, 1989, ED 308 550
White, 1988, ED 296 950

SOCIAL SUPPORT GROUPS
Dale, 1986, ED 279 206

SOCIOECONOMIC INFLUENCES
Howley, 1989b, ED 308 058
Rios, 1988, ED 296 820

SPECIAL EDUCATION
Interstate Migrant Education Council, 1988, ED 294 703
Naylor, 1985, ED 259 217
Rodriguez, 1988, ED 2[illegible]579

SPECIAL PROGRAMS
Ascher, 1985b, ED 267 150
Mattera, 1987, ED 284 704

STANDARD SPOKEN USAGE
Christian, 1987, ED 289 364

STANDARDIZED TESTS
Brescia & Fortune, 1988, ED 296 813

STRESS MANAGEMENT
Herbert, 1983, ED 287 139

STUDENT ATTRITION
Donnelly, 1987, ED 292 172
Kerka, 1989, ED 308 401
Nelson, 1985, ED 282 347

STUDENT BEHAVIOR
Bempechat & Ginsburg, 1989, ED 315 485

STUDENT CHARACTERISTICS
Ascher, 1985b, ED 267 150
Ascher, 1988a, ED 304 498
Edington & Koehler, 1987, ED 289 658

STUDENT MOTIVATION
Cajete, 1988, ED 296 812
Kidwell, 1986, ED 286 703

STUDENT NEEDS
Riddlemoser, 1987, ED 289 368
Ascher, 1985b, ED 267 150
Interstate Migrant Education Council, 1988, ED 294 703
Johnson, Lovel, Morales, Morse, & Prokop, 1986, ED 270 242
Pallas, 1989, ED 316 617
Ramon, 1985, ED 268 188
Wells, 1989a, ED 308 276
Wells, 1989c, ED 311 148

STUDENT PARTICIPATION
Kirby, 1989, ED 309 135

STUDENT PROBLEMS
Thornbrugh & Fox, 1988, ED 295 773

STUDENT PROMOTION
Ascher, 1988a, ED 304 498
Webb & Bunten, 1988, ED 306 327

STUDENT RECORDS
Lunon, 1986, ED 286 700

STUDENT VOLUNTEERS
Kirby, 1989, ED 309 135

SUBSTANCE ABUSE
Bempechat, Stauber, & Way, 1989, ED 316 615
Lachance, 1988, ED 304 628

SUMMER SCHOOL
Ascher, 1988e, ED 298 213

TALENT IDENTIFICATION
Florey & Tafoya, 1988, ED 296 810
George, 1987, ED 284 715

TEACHER INFLUENCE
Asher, Williams, Burton, & Oden, 1987, ED 283 625

TEACHER RESPONSIBILITY
Wolverton, 1988b, ED 293 680

TEACHER ROLE
Florey & Tafoya, 1988, ED 296 810
Riddlemoser, 1987, ED 289 368
Wolverton, 1988b, ED 293 680
Wolverton, 1988a, ED 293 681

TEACHER-STUDENT RELATIONSHIP
Peyton, 1987, ED 281 366

TEACHING METHODS
Egertson, 1987, ED 293 630
ERIC Clearinghouse on Languages and Linguistics, 1983, ED 227 694
Hornick, 1986, ED 275 792
Katz, 1987, ED 290 554
Lyman & Foyle, 1988, ED 306 003
Passow, 1989, ED 306 346

TELECOMMUNICATIONS
Barker, 1987, ED 286 698

TEST BIAS
Florey & Tafoya, 1988, ED 296 810

TEST USE
Stevens, 1984, ED 252 581

TEST VALIDITY
Brescia & Fortune, 1988, ED 296 813

TESTING PROBLEMS
Brescia & Fortune, 1988, ED 296 813
Hills, 1987, ED 281 607

TRACK SYSTEM EDUCATION
Bempechat & Wells, 1989, ED 315 484

TRADE AND INDUSTRIAL EDUCATION
Imel, 1989, ED 304 564

TRANSITIONAL PROGRAMS
Sitlington, 1986, ED 272 769
Naylor, 1985, ED 259 217

UNDERACHIEVEMENT
Bempechat & Ginsburg, 1989, ED 315 485
Bleuer, 1987, ED 286 112
Bleuer, 1988, ED 304 631

UNEMPLOYMENT
Naylor, 1989b, ED 305 493

UNITED STATES HISTORY
Sensenbaugh, 1989, ED 308 550

URBAN EDUCATION
Ascher, 1987b, ED 287 972
Ascher, 1988c, ED 293 973

URBAN ENVIRONMENT
Swift, 1988, ED 296 818
Vaughn & Vaughn, 1986, ED 270 243

URBAN SCHOOLS
Webb & Bunten, 1988, ED 306 327

VIDEODISKS
Barron & Others, 1989, ED 316 214

VIDEOTAPE
Barron & Others, 1989, ED 316 214

VOCATIONAL ADJUSTMENT
Sitlington, 1986, ED 272 769

VOCATIONAL EDUCATION
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988a, ED 307 381
ERIC Clearinghouse on Adult, Career and Vocational Education, 1988c, ED 296 171
Harrison, 1986, ED 268 302
Imel, 1986, ED 275 888
Naylor, 1985, ED 259 217
Naylor, 1987, ED 282 094
Tindall, 1988, ED 303 683

VOCATIONAL ENGLISH SECOND LANGUAGE
Harrison, 1986, ED 268 302
Lopez-Valdez, 1985, ED 260 304

VOCATIONAL REHABILITATION
Wolford, 1986, ED 272 770

WITHDRAWAL EDUCATION
Nelson, 1985, ED 282 347

WORD PROCESSING
Shermis, 1989b, ED 307 607

WORK ENVIRONMENT
Vaughn & Vaughn, 1986, ED 270 243

WORLD HISTORY
Sensenbaugh, 1989, ED 308 550

WRITING COMPOSITION
Boloz, Hickman, & Loughrin, 1987, ED 281 698
Stotsky, 1987, ED 285 800

WRITING INSTRUCTION
Hornick, 1986, ED 275 792
Hudelson, 1988, ED 303 046
Sensenbaugh, 1989, ED 308 550
Shermis, 1989b, ED 307 607
Stotsky, 1987, ED 285 800

WRITING PROCESSES
Risinger, 1987, ED 285 829

WRITING SKILLS
Hudelson, 1988, ED 303 046
Risinger, 1987, ED 285 829

YEAR ROUND SCHOOLS
Ascher, 1988e, ED 298 213

YOUNG CHILDREN
Hills, 1987, ED 281 607
Honig, Wittmer, & Gilbralter, 1987, ED 287 592

YOUTH PROGRAMS
Ascher, 1988d, ED 306 326

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